ROYAL COMMISSION ON MATTERS OF HEALTH AND SAFETY ARISING FROM THE USE OF ASBESTOS IN ONTARIO

CHAIRMAN: J. Stefan Dupre, Ph. D.

COMMISSIONERS: J. Fraser Mustard, M.D.

Robert Uffen, Ph. D., P. Eng., F.R.S.C.

COUNSEL: John I. Laskin, LL.B.

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THE FURTHER PROCEEDINGS IN THIS INQUIRY RESUMED PURSUANT TO ADJOURNMENT

APPEARANCES AS HERETOFORE NOTED

DR. DUPRE: Good afternoon, ladies and gentlemen. On behalf of my colleagues, I wish to welcome you to this further day of informal Commission hearings.

May I first ask our reporter if his sound system is working to his satisfaction?

THE REPORTER: Very good, sir.

DR. DUPRE: May I at this point remind myself and all others who speak to us, to speak directly into the microphone.

I welcome at this time Mr. Joe Duffy, the secretary-treasurer of the Provincial Building and Construction Trades Council of Ontario, who is appearing on behalf of that organization.

Mr. Duffy, you are most welcome indeed. Proceed, sir.

MR. DUFFY: Good afternoon, Mr. Chairman.

UNIDENTIFIED SPEAKER: The sound system doesn't seem to be working?

DR. DUPRE: You can't hear us?

UNIDENTIFIED SPEAKER: No.

DR. DUPRE: I guess your...

THE REPORTER: It isn't amplified.

DR. DUPRE: I see.

It's not amplified, so we will have to speak loud and clear. Can you hear me now? Thank you.

Mr. Duffy, please.

MR. DUFFY: I would just like to start off by reading the brief I sent to the Commission. It is submitted to the Royal Commission on Matters of Health and Safety Arising from the Use of Asbestos in Ontario.

"We, the Provincial Building and Construction Trades Council of Ontario, respectfully submit the following brief:

The Provincial Building and Construction Trades Council of Ontario as part of the Labour Management Safety Committee, have gone on record as giving full support to the brief presented on behalf of the Construction Safety Association of Ontario.

On January 1, 1981, I became secretary-treasurer of the Provincial Building and Construction Trades Council of Ontario. Over my years of working on construction sites, I have watched my fellow members of Local ninety-five working with asbestos, not knowing that in a short time I would be going to some of their funerals.

Over the last twenty-five years I have been an asbestos worker, a member of Local Ninety-five of the International Association of Heat and Frost Insulators and Asbestos Workers, starting in 1956 on the St. Mike's Hospital new laundry and numerous other construction sites, namely the O'Keefe Center, Toronto-Dominion Center, Western Hospital, Sick Children's Hospital, Toronto General Hospital, East General Hospital, North York Hospital,

MR. DUFFY: (cont'd.) "Grace Hospital, and many others. I have also worked on more schools than I can remember. All of these sites have asbestos material on either the heating pipes or the boilers and furnaces.

We believe that we are now seeing the results of bad work habits and poor planning in the construction industry where asbestos has been used as an insulation material for many years.

This practice is not as common now. There are still a few products with asbestos bases, namely, floor tiles, drywall, caulking compound, and asbestos pipes.

As to the problem of identification of asbestos material, I would like to say that in my twenty-five years of working on construction sites in both Canada and in the United States, there was not one of the new construction jobs that did not have asbestos material in it. Therefore, the Provincial Building and Construction Trades Council of Ontario recommend to the Ministry of Labour the setting up of a proper procedure in the removal of asbestos which will provide a practical and effective standard of protection.

I could set down a set of regulations, but this is well looked after in the briefs submitted by the Construction Safety Association and Iron Workers Local 721."

I would just like to make a personal comment now in regards to...and this is in regards to my own experiences working as an asbestos worker. First of all, I emigrated to Canada in 1955, at sixteen years of age, and joined Local 95 in 1956. At that time, got right into working with asbestos.

MR. DUFFY: (cont'd.) No one ever informed me when I started that I was working with a dangerous material or a hazardous material. One of the first...as I mentioned...one of the first jobs I worked on was St. Mike's new laundry building at Bond and Victoria Street, I think it was. Most of the high pressure steam lines on that job were covered with asbestos insulation.

From that job I moved to an oil refinery, which is now Texaco Oil Refinery, but in those days it was called Region Oil. We used to make comments about how nice the dust looked in the sun as it floated past. One of my jobs there was to mix the asbestos for the mechanics on the job to flat trowel onto the vessels. I used to...I wouldn't be exaggerating if I said I mixed at least forty bags of asbestos cement...one hundred pound bags of cement a day, and it was just in an open area where, when I busted the bag open and poured it into the cement mixer, it blew right across the whole construction site.

The reason I am making these points is not because of myself as an asbestos worker, or my fellow members of Local 95, but for the other tradesmen who were there who didn't...who probably at that time didn't realize what was going on around them, the same as I didn't realize what I was working when I was busting those bags open, and spitting it out as it clogged in the back of my throat.

The first time I ever became aware of the problem of asbestosis was in 1972, when I attended my first international convention in Las Vegas, where Dr. Irving Selikoff was a speaker, a guest speaker at our convention.

By then, according to his figures, I was well on my way. I was close to having twenty years in. I had, I think, seventeen years at that time, and he had said that asbestosis does not show up until you have worked in it around roughly twenty years.

MR. DUFFY: (cont'd.) We, the Provincial Building Trades, would like to see a set of specifications or regulations set down by the Ministry of Labour, and enforced so that when a job is put out for bid for the removal of asbestos on construction sites, everyone has got to bid on the same regulations.

I had Linda pass you around an example of what we are talking about, and this was given to me as secretary-treasurer at a labour management meeting, by one of our provincial councils, and it's in regards to two schools. One, the Hagersville High School, where the job was done under a set of specifications and, I think, this is the set of specifications that the Department of Labour is asking people to use. They are taken from OSHA, down in the United States.

I'll not bother reading these two job sites out, but as you see, on the Hagersville High School everything was done according to the way it should be: Material swept up, put in plastic bags, separate lunchrooms, mass showers provided, filters for the masks renewed daily. Everything right down to separate portable toilets.

The second job, done by the same contractor, the exact opposite. The asbestos removed by wetting it, but left to lie on the floor to dry up, to be blown in the air. No change rooms. The workers were actually walking out of those rooms through a playground loaded with children, taking it out into the playground, going to a public place, a restaurant, sitting in the same workclothes.

Now the union that give me the complaint checked the workers out, and these workers were not tradesmen of any trade. They were hired out of the U.I.C. office as temporary help for this company.

I think the only good thing I could probably say about St. Anne's School was, that they used a cake of Irish Spring soap. That was the only thing they supplied, was one

MR. DUFFY: (cont'd.) cake of Irish Spring soap.

Also, in my previous position as business manager of Local 95, I had a conversation with one of our employers who bid a job for removal of asbestos. He put in two submissions, one for portable vacuum cleaners to vacuum the material up as soon as it landed on the ground, and one, a mobile vacuum truck. I have never seen one of these, but he tells me that they have been used down in the United States, where they pump in fresh air and removed the dust out of the air that's in the room.

His price was a hundred and sixty thousand dollars for the mobile vacuum, and for the industrial vacuum cleaners it was something in the matter of a hundred and thirty-five thousand. The contract was let for ninety thousand dollars, and how the job was done was, the insulation was just pulled off and let all the dust blow in the wind.

This is why we are speaking today. We would like... again I'm going to repeat...we would like a set of regulations set down, and no stripping of asbestos unless those regulations are abided by, and all jobs should be bid with the same regulations.

I left one job out that I worked on, and all the beams were spread with it. I'm afraid to say that I'm sitting in it. I worked in this building when they were building it, and all the beams here are spread with asbestos, and the high pressure steam lines are covered with asbestos pipe cover.

I think that's all I have to say.

DR. DUPRE: Thank you very much, Mr. Duffy.

I find the two examples that you have brought into us for the sake of illustration quite interesting. May I ask you, sir, where St. Anne's School is located in Ontario?

MR.DUFFY: It's in the Hamilton area.

DR. DUPRE: It's in the Hamilton area?

MR. DUFFY: Yes. And Hagersville is in the

MR. DUFFY: (cont'd.) Hamilton area, too. It's just up on the mountain.

DR. DUPRE: Now, you and those you represent are evidently highly experienced in this field, and of course we have had an asbestos control program in place, really only for a relatively short period of time. I would take it that both the Hagersville and the St. Anne's School examples came up when, in the course of the last year to eighteen months?

MR. DUFFY: The last six months.

DR. DUPRE: I see. Now...

MR. DUFFY: I have...if you don't mind, Mr. Chairman, I have been secretary-treasurer of the Provincial Building Trades since January 1st, and that report either came in February or March of this year.

In your...in the document I give you, you notice that I typed something out.

DR. DUPRE: Right.

MR. DUFFY: That was the name of the inspectors, the safety inspectors who had been on the job, and those safety inspectors are the same safety inspectors on both jobs.

DR. UFFEN: Were they different...

MR. DUFFY: I'm not sure...

DR. UFFEN: With a different man in charge of the two?

MR. DUFFY: Sorry?

DR. UFFEN: Was there a different person in charge of the two operations?

MR. DUFFY: I think there was. I'm not sure of that point, but I think there was. But it was the same company. The company is from Toronto, that removed the asbestos on the Hagersville School and St. Anne's. The same company, but it could have been different foremen, you know.

There was no complaint about the Hagersville School.

MR. DUFFY: (cont'd.) When the complaint first came in, it was in regards to St. Anne's School, the problems there, and why the two same inspectors, and when they brought it up I said to them, well, could you please give me the examples and they wrote down the one about the Hagersville School, that they had matched everything that was required, and then the second one where everything was ignored.

DR. DUPRE: What we have, incidentally, in these two examples...let me see if I've got it straight...is the same contractor, same safety inspectors?

MR. DUFFY: Correct.

DR. DUPRE: Now, at this point is the difference that in the Hagersville case the workers are experienced workers and members of a union? Whereas in the other case they are inexperienced and unorganized? Is that the difference?

MR. DUFFY: No, I don't believe so.

DR. DUPRE: No?

MR. DUFFY: Again, I tried to find that point out, and the union wasn't able to tell me whether it had been the same way, people hired from the U.I.C., that did the Hagersville job, or not. All they know is the conditions that were there.

You know, that's the point they are making. But they did check it out because they tried to force a shutdown on the job on St. Anne's School. They tried to force the workers to come out because it was unsafe, and they found out at that time that those workers did not belong to any union, so therefore they couldn't approach any union to ask them to stop working because of the health hazards on the job.

DR. DUPRE: Dr. Mustard?

DR. MUSTARD: Was it a difference, then, in the school board specification?

MR. DUFFY: No.

DR. MUSTARD: Did the Hagersville School specifications require the contractor to do this?

MR. DUFFY: Yes.

DR. MUSTARD: It did?

MR. DUFFY: Yes.

DR. MUSTARD: And St. Anne's School Board didn't?

MR. DUFFY: It's my understanding...what do you call it...the same conditions were on both job sites, but just the company...nobody bothered checking the job site and the inspectors when they went there seemed to be quite satisfied that things were going okay, but the same specifications were there. They were supposed to go by the set of specifications.

It's my understanding that these specifications are not law or not regulated or anything. It's just the recommendation of how you should remove asbestos. This isn't... if you go to the Department of Labour, they will recommend these conditions, but there is no one there to say that you've got to abide by them. This is what we want. We want a set of regulations that says this is the way you are going to remove it, and if you are not going to remove it, then we'll stop the job or we'll give the job to someone else who will abide by the regulations.

DR. DUPRE: Could I ask the members of the staff if we indeed have copies of the regulations that Mr. Duffy is holding? If we don't, they might be very useful to us.

DR. DEWEES: I expect we do, from one source or another. Yes, I think we have those.

MR. DUFFY: See, the reason we questioned this was because at our labour management meeting there was a representative there from the Department of Labour, and we questioned him, well is there a set of specifications or a set of regulations that they have to work by? He said, oh, yes, there is.

But really, when it got right down and we asked for copies of it, we never received any copies. Eventually

MR. DUFFY: (cont'd.) we received this, and this is OSHA's specifications. And that's why I'm saying, there is no rules and regulations to say that these have got to be stood by one hundred percent.

DR. DUPRE: Dr. Dewees, did you have questions?

DR. DEWEES: Do you know whether any measurements were taken of the fiber belts on either of the work sites?

MR. DUFFY: It's my understanding on the Hagersville there was, and on the second one there wasn't. What happened was, when the business agents went to check the St. Anne's School, the safety inspectors who were there gave the business agents hell because they were going on the job without construction boots. They told them if they didn't get off there would be charges laid against them. They didn't seem to be worried about the people working, removing the asbestos. They seemed to be more interested in the business agents going on the job without construction boots.

DR. DEWEES: So to the best of your knowledge...

MR. DUFFY: There was no count, fiber count taken, or no air sample taken.

DR. DUPRE: Dr. Uffen?

DR. UFFEN: In the numerous amount of paper we collect, it's easy to lose track of something like this, and it doesn't have any identification on it. I want to make sure I get...whose report is this? Where did this information come from?

MR. DUFFY: It came from the business agent of the Hamilton Building Trades Council to the Provincial Building Trades Council.

DR. UFFEN: A quote from him to whom? I mean, who wrote this down? Whose words are these?

MR. DUFFY: That is the report from three business agents who were on the job. Three business agents who were

MR. DUFFY: (cont'd.) involved in both jobs...both the Hagersville High School, and the same three happened to be at the St. Anne's School. They went together to make a complaint in regards to the way the job, the mess the job was in.

DR. UFFEN: To whom did they write this?

MR. DUFFY: To me.

DR. UFFEN: To you?

MR. DUFFY: Yeah.

DR. UFFEN: Okay.

DR. DUPRE: Any further questions on this matter?

Dr. Mustard?

DR. MUSTARD: It's tangential to this matter.

DR. DUPRE: Please.

DR. MUSTARD: Obviously your union has opportunity to come in contact with asbestos now and in the future. What kind of arrangements have you made to ensure the members of your union understand the hazards of asbestos and what steps, if any, can they take on projects if they find they are being inappropriately exposed?

MR. DUFFY: Well, as I say, I'm no longer the business manager of Local 95. I'm the secretary-treasurer of the Provincial Building Trades...but our membership is well aware. We have had Dr. Selikoff here in Toronto at our union meeting showing us his slides and briefing us in regards to asbestos.

I must admit that our contractors, the material we use now, there is no asbestos in the insulation that we use now, at all. But I guess the problem where the members of Local 95 still run into it, is when they go on existing oil refineries where the insulation has been damaged, to take the old insulation...and at that time they would wear a mask.

DR. DUPRE: Dr. Dewees?

DR. DEWEES: It's clear if your members are

DR. DEWEES: (cont'd.) involved in a building, in an asbestos removal operation, they presumably are aware that they are being exposed to asbestos, because that's the very purpose of the job. What about the other sorts of work that your members do, for example maintenance or rebuilding part of an existing building or refinery, some such, how would the members in that case know whether or not the material they were working on might contain asbestos? And if that's a problem, do you have any recommendations with respect to how they would be notified that this job does not involve any exposure, possible exposure, and this job does, or may?

MR. DUFFY: To my understanding there is only about one company that has really applied for the removal of asbestos, and that was a company called Amon and Riggs. They set up, they went to the Department of Labour, set up the same type of standards that are written here, and followed those standards right down and everyone was notified on the job that that's what they were working with, was asbestos.

In regards to the other maintenance jobs, a majority of our people know the difference, the new material and the old material that had asbestos in it.

DR. DEWEES: So they would judge by the age of the material?

MR. DUFFY: Yes.

DR. DEWEES: Post-1973 or whatever date...

MR. DUFFY: Yes.

DR. DEWEES: ..they presume it's not, and if it's pre-1973, then they would assume that it is?

MR. DUFFY: Yeah. What do you call it...the insulation, you know when you go near it what really is it made of. The likes of now, we use thermasbestos, which is a different material than the asbestos we used to use years ago, okay? It's called thermasbestos, but there's no asbestos in

MR. DUFFY: (cont'd.) at all. Johns-Manville have made it and it's been tested, and no asbestos in it at all. It's a silicate that's in it now, you know, more sand and everything in it than asbestos. So really, we are out of the asbestos field, other than, as you say yourself, maintenance, taking off of old insulation. As far as demolition, our union is not involved in demolition.

Well, I say our union. I mean the Asbestos Workers Local 95. As I say, I don't represent them anymore.

DR. DEWEES: Thank you.

MR. DUFFY: The only other thing I would like to say is that we, the Provincial Building Trades, would like to see a file set up or some type of information system that can record a man who has worked with asbestos, where in future I know where some of the compensation cases I went down in, and spoke in regards to, you've got to prove that the man worked with it. You know, just because you've been in the International Association of Heat and Frost doesn't mean you've worked with asbestos. You could have worked with fiberglass, or stuff like this.

We would like to see, when the regulations are brought down, that also a file be kept for each person who works in the removal of asbestos.

DR. DUPRE: Can I ask you this on that point? Are there special problems in accomplishing what you would like done, in the construction place, given perhaps turnover, the changing nature of the job and so on and so forth, and if there are such complications, do you have any suggestions as to how to overcome them?

MR. DUFFY: No, I couldn't answer that question. As you say, there is such a turnover of men working on different sites. I think Brother Donaldson of the Iron Workers 721, who spoke at your last hearings, was saying that some of their

MR. DUFFY: (cont'd.) people had worked at the removal of asbestos off the beams that they were replacing.

It's hard for the union, as much as it would be hard for anyone, to set up a system. But we figure with the possibility of regulations coming down for the removal of asbestos, at that time that someone in some position in the Ministry of Labour could set up some system where a man has worked on the site, because that site was bid under those conditions, that those men recorded in that job site could be put down and say well, these men worked on that job site for removal of asbestos.

As far as going back and trying to set up a system now, I think it would have to be set up on such-and-such a date.

DR. DUPRE: Mmm-hmm.

MR. DUFFY: That's not answering your question, but I know it's going to be awful hard to do it.

DR. DUPRE: You acknowledge that it is harder to do it in construction than in fixed-place industry?

MR. DUFFY: Yes.

DR. DUPRE: Are there any further questions of Mr. Duffy?

Mr. Duffy, may we thank you very, very much indeed for your brief and for your appearance this afternoon.

MR. DUFFY: Thank you.

(REPORTER'S NOTE: Dr. Dupre, speaking in French, introduces Mr. Georges Dahmen of the Quebec Energy Ministry.)

DR. DUPRE: It is my pleasure to greet most warmly the representatives of the Quebec Ministry of Energy and Resources. May I invite you, please to proceed?

MR. DAHMEN: Thank you, Mr. Chairman.

First, I would like to thank the Commission for giving us the opportunity to present our views to some of the questions you are addressing here, sir.

Second, I would like to present the people who are here with me at the table. On my far left, Mr. Mac Trudeau, who is from the Commission La Sante de Securitee de Travail. I think he will be coming back to you one of these days.

Monsieur Pampalon, who is an epidemiologist from the Social Affairs Department, and who has been one of the authors of an environmental study done on the population of the Quebec mining regions and comparisons with other regions.

I did send you that study, a copy of the study. That will be published, or has been presented for publication at the Union Medical Journal in Quebec. I don't know if I mentioned that when I did send it, so it is to be kept.

Now, since we have a very short period of time, I would like not to summarize the document I did send to the Commission, but I would like to say there is no need, in fact, to point out the importance for the Quebec government of health and safety in the workplace, the environment and public health in general.

In 1975, a Comite d'etude sur la salubrite dans l'industrie de l'amiante, known as the Beaudry Committee, has been set up, and this report in 1976 was immediately followed in July 1977...although we had elections in November 1976...by a new order-in-council that changed the dust concentration that we are allowed in our mines and mills.

Also, new regulations were introduced on environment and quality of air in December, 1979, and followed at the same time by a new law on health and safety, Bill 17, promulgated in December, 1979.

MR. DAHMEN: This is to emphasize the fact that although we are, in Quebec, first producers of asbestos in the free world, I think it makes us more aware of the problems that have been associated with asbestos since it involves our workers and our population. Those laws and regulations have been introduced recently...1979 is not very far...I think are among probably the strongest in order to protect and stating the rights for a better and cleaner workplace and environment.

Our position...I should say our consideration that have led to a position on the workingplace in Quebec... have been already transmitted to international organizations and to the federal government. But here, at this Commission, I would like to point out that in the workplace we are convinced that no new facts, no new scientific evidence has ever been presented that would invalidate the regulations that we have adopted in 1977, and are similar to those existing in most of the industrialized countries.

On the contrary, we have the impression that the new knowledge that we have from recent studies serve to confirm that actual norms that we have in the matter of control of utilization of asbestos are adequate to ensure the protection of the physical integrity of our workers, and limit the risk of this activity at the minimal level for all of the diseases that have been associated with exposure to respirable asbestos dust.

Thus, we are convinced at the same time that actual norms, in fact, should be maintained, but that the emphasis should be put in having them applied not only in all mines and mills, but also in all industrial situations or in all situations where there is a possibility of having respirable dust.

I must add that we believe that a lot of time is

MR. DAHMEN: (cont'd.) spent in trying to change a norm instead of applying the one that exists. We have also, as you may know, considered the possibility that regulations coming in from different countries in the world are in fact going well beyond the protection of the health of the workers, and are in fact becoming trade barriers.

As a pollution or risk to the general public, or an environmental exposure, we believe also that the asbestos dust level in the general environment is so much lower than in occupational settings that there appears to be little or no risk to the public in the sense that evidence of the risk may extend after a normal lifetime. As evidence of that in Quebec, we have this general mortality study on cancer in the asbestos mining towns, compared to sixty-seven other cities and towns, and it gave no evidence of increased risk for general population as approximated by the female population.

The Simpson Report concluded the same thing in trying to assess what environmental pollution could do to the health of the public.

On a third point, which is the use of products, here we are convinced that no risk exists, because in those products in general, all of them, whatever the asbestos fiber is, it is locked in. Thus, in total, there shouldn't be any effects since it is locked in.

But the one that we may have in terms of preparing, making those products or removing them at the end, we think that measures can be taken, work practices can be done, that will remove any probability of exposure.

Now, for the general public there is no significant exposure that would be had from those products, and thus we do not see any risk for the public health.

In conclusion, Mr. Chairman, I will say that if our government had any reasonable doubt that our regulations

MR. DAHMEN: (cont'd.) are not ensuring physical integrity of workers, or are leading to some risk to our population, well, first I would say that we would have already regulations coming in, and second, we wouldn't be here but to urge you to do the same.

So I will stop at this point and be ready to answer any questions.

Thank you very much, Mr. Chairman.

DR. DUPRE: Dr. Uffen?

DR. UFFEN: Yes. I read this quite thoroughly and I found it quite helpful...and I'll come back to it later on...especially when you examined the proposed legislation in Ontario and made comments on the various clauses.

But before I get to that, I want to make sure I understand the main point of your presentation, as I read it, was that the existing levels monitored and carefully observed are quite adequate. Does that include the ban on...not chrysotile...

DR. DUPRE: Crocidolite.

DR. UFFEN: Crocidolite?

MR. DAHMEN: You mean should we have a difference between the different fibers...?

DR. UFFEN: When you say the existing regulations are adequate, do you mean to include or exclude the ban on that, because it's controversial.

MR. DAHMEN: Well, there is no ban on crocidolite in Quebec, and as you know, we produce only chrysotile...although we use some crocidolite in asbestos cement and we have used it in some other products, although it is replaced more by amosite, so there is no regulations that goes on specific fibers. The regulations are addressed to asbestos fibers, so it is including any type of fiber.

DR. UFFEN: But you make a point about exporting,

DR. UFFEN: (cont'd.) and then you export to a country which does or does not have a ban. Their regulations are important and I guess what I'm trying to find out is, do you have any view about the controversy over to ban or not to ban crocidolite?

MR. DAHMEN: Yes, we may have a few. We have an article that was published in December, 1980, by Doctor Davis, I think, and it's a review of all the literature on distinguishing between those fibers. His conclusion is that first, there is a lot of incoherence between all the studies that have been done trying to distinguish between the chrysotile and the amphiboles in general.

On the other hand, one of his strong conclusions is that if we are talking about protecting our workers, then epidemiological evidence seems to be in favour of making different regulations for the different fibers. The epidemiological studies, although we have no idea in none of them, in any of them, that...to what level of dust people have been exposed...we have no idea in any of them...it still remains that crocidolite has been shown more potent in those epidemiological studies than chrysotile.

But this...I don't know if you had the occasion to read that article by Dr. Davis, I have it with me if you want, I could give it to you...that's his conclusion. We cannot, at this point, really make a difference with certainty in terms of all the animal studies, cytotoxic studies and so on. Epidemiological evidence seems to be pointing to more potent effects, but at the same time there is no measurement that has been done.

If you regulate two fibers, do you regulate it as well for crocidolite? That's the question I would return to you.

DR. UFFEN: Could I ask you another point? You referred to 'minimal' a couple of times here...for example, on page eight of your presentation, the middle, "It can be concluded that current standards, due to improvement in sampling techniques and methods of counting, is more stringent than in 1969 and implies a minimal risk".

What do you mean by 'minimal'? The lowest achievable?

MR. DAHMEN: Minimal should be always taken as a sociological and societal sense, acceptability of risk. Unless we are really trying to have a no-risk world, which is nonexistent, we have to compare risks. This has not been done yet, really, but I would suggest that..although I hate percentages.....a minimal risk is something that you may not be able to measure, and that would be the lowest that we could really say about minimal.

I would suggest that one-fourth of one percent is certainly minimal. I would suggest that possibly one-tenth of one percent is minimal. But at the end, it is the sociological acceptance of such risk which is the main factor. Nobody wants to take that risk while the minimum is zero.

DR. UFFEN: I am remembering a very nice presentation that was put to us by the Quebec Asbestos Mining Association, which was very well documented. In the mines the regulatory procedures seemed to be well established and they were being monitored and air measurements...good data. But it varied throughout the year, and sometimes they could achieve the regulatory requirement, and sometimes they could get below it. My understanding of the use of the word minimal would be, they should always try to achieve the minimum that they are capable of achieving, whether or not it was the standard in law or not. Would that be a different interpretation

DR. UFFEN: (contd.) from your usage?

MR. DAHMEN: No, I don't think that would be different. I must say that looking at the data from the past, and looking how it has been modified, let's say in the past ten years, but essentially in the past five years, we have to recognize that some drastic change has been done in our mining operations. They are now, I think, the asbestos industry can be proud of it because really I think they have achieved something which is uncommon.

So we have to be fair and admit that, they have done it in the past five years really, although it started twenty years ago.

My minimal was taken by looking at the Simpsons Report, where it was said that possibly one percent rate could be considered as being minimal, as long as it was accepted by society. That's what it says in there.

Looking at the data and correcting for our situations, I arrived at one-fourth of one percent for asbestosis, and I arrived to, let's say one percent, for cancer. With all the uncertainties we have, I arrived at that number. And from a public health point of view, or for health of the workers, I think that the kind of risk that would be there after a lifetime and fifty years of that kind of thing, you know, there's a lot of conditions to arrive at that kind of results, I would say it would be reasonable to take that risk if I was a worker in that industry, because it is even lower than risk in many other industries, it's lower than the risk that we are incurring by taking our own decision to smoke.

Well, with all those data, I would say it's a minimal risk.

DR. UFFEN: Now, a little preliminary question, is your ministry responsible for monitoring the activity of the

DR. UFFEN: (cont'd.) asbestos mines, or is another ministry?

MR. DAHMEN: No, well, it was. At a time before the Commission was created, the inspection of mines and mills was done through the Energy and Resource Department. Now all prevention and inspection is done by the Commission La Sante Securite de Travail, and our inspectors have been transferred, I think, to the Commission.

Mr. Trudeau could answer that.

DR. UFFEN: This would affect the way I put my next question. I thought I noticed in the Asbestos Mining Association's report that there was a seasonal variation in their ability to control the fiber count. It wasn't random, it was seasonal, and that for a large part of the year they could keep well below the two fibers per cubic centimeter.

If I'm right in this, I would like to find somebody who could tell me why they have trouble keeping to one fiber per c.c. the rest of the year.

MR. TRUDEAU: I'll try to answer your question. I have been working for the Quebec Asbestos Mining Association for almost four years, and that's why maybe I'm able to answer your question.

We probably did not...the Quebec Asbestos Mining Association does, every year, what they call a semi-annual survey in which they take many samples in a very short period of time...three weeks, four weeks...and it's done in mainly, most of the companies do that in September and April or May.

I am not aware that there was a seasonal difference in those two semi-annual surveys. We observed, since 1970, for most of the mines, a continuous grading, a negative slope, for the concentration of asbestos dust in the mills. In 1970, it may be close to between fifteen and twenty fibers per cubic

MR. TRUDEAU: (cont'd.) centimeter, slowing down to in the neighborhood of one point eight fibers per cubic centimeter in 1979, which is the last year it was done.

Now to answer your question, they presented new data that I am not aware of. That could be that they saw with new evidence that there is a difference between, let's say, the winter season and the summer season, and the only parameter I would see is that in the winter they have recirculated air, and that helps. That recirculated air is filtered through...

DR. UFFEN: Is it humidified?

MR. TRUDEAU: No. No, it's not humidified. It's filtered through bag filters and it's recirculated in winter.

This air, there is a regulation of the Quebec government, it's a gravimetric regulation of point two milligrams per cubic meter of total respirable dust. That includes everything, chrysotile...it includes also serpentine and whatever other dust there could be, other particles there could be in the dust.

I am not sure that...I would like to see the data showing which season would be, would show the highest count, because we claimed, when I was there, we claimed that the recirculated air was even cleaner sometimes than the outside air. So I wouldn't say that the winter air, because it's recirculated air, would show a much higher concentration of dust. I don't know. But it could be...it's the only different parameter between winter and summer.

DR. UFFEN: I have one more question.

DR. DUPRE: Please.

DR. UFFEN: If I could refer now to your analysis of the proposed regulations in Ontario, you are the first one that pointed out...to my knowledge anyway, the problems over the definition of asbestos. In this regulation, asbestos means: "a fibrous asbestos material", which is like saying my name

DR. UFFEN: (cont'd.) is Robert Uffen because my name is Uffen Robert. It's a strange definition.

Now, you have devoted two pages, or a whole page on it. Would you like to elaborate on it, because I think you have put your finger on a pretty fundamental thing here?

MR. DAHMEN: Well, I was reading an article by Malcolm Ross, from the United States Geological Survey, and reading that article and thinking that I knew something about asbestos, I realized how little I knew about it. In this article, Mr. Malcolm Ross is saying that if you don't...if regulatory people do not take care of having very well-defined things, they may end up banning the earth's crust. That is what his conclusion was in that paper, and I was struck by how difficult it is to define really what we are talking about... not only in terms of measurements, but in terms of what we are talking, the minimal fibers, and that article was the basis of that consideration that I made, and also other articles that have been given to us on the same subject.

I don't know if you have had that paper of Mr. Malcolm Ross.

DR. UFFEN: I don't recall it.

MR. DAHMEN: Well, we'll give it to you, too, if I have it.

DR. DUPRE: My counsel indicates that we do have it.

MR. LASKIN: We do have it, yes, thank you.

DR. UFFEN: What I am leading up to is, in the province of Quebec or in your Ministry, do you have a definition of asbestos that is more specific than this?

MR. DAHMEN: Well, more and more we are talking about the one we found in our mines and mills, surely. We are talking about chrysotile asbestos, which is quite well defined.

MR. DAHMEN: True, it is the only one in this group, and so...

DR. UFFEN: Is it defined in terms of its chemical composition or...?

MR. DAHMEN: Well, we didn't go to that. We are talking also about asbestos fibers, but we may well wonder if we are talking about asbestiform fibers, or if we are talking about asbestos fibers. This has not been elucidated, either.

Our regulations are done the same way as other countries, without going to the...you know, final detail of that, so if I raise the question, it's because we are raising the same question on our own side.

MR. TRUDEAU: May I add something to what Mr. Dahmen said?

The definition of asbestos depends what you are talking about. If you are talking the product, asbestos is a product that you get after mining and milling a mineral ore, which is chrysotile, and you put it into bags and you sell it. That's asbestos for the guy who puts it into production.

But what we are interested in here, I guess, is asbestos dust, which is different from asbestos. All the regulations attempt to define what is asbestos by physical parameters that are not chemical at all. We define, like when we measure asbestos dust on a filter by light microscopy, we define the asbestos by a particle which has a length-to-diameter ratio of three to one, and which has a length of greater than five microns. So this is the definition of asbestos dust to the analyst that does the analysis of the dust in the air, and this definition may be then different for the guy that will have to do measurement for other purposes than health and safety. If he measures asbestos dust or asbestos for quality control or whatever, it's another definition, but everybody has a definition for pursuing his own purpose.

DR. UFFEN: You raised the point in the presentation here, about other kinds of mining, such as nickel or something like that, that come from ultrabasic rock, and a figure that sort of startled me that something like twenty percent of the other mines may have asbestos fibers in the gang, in the waste.

MR. DAHMEN: Yes, that consideration is raised by the United States Geological Survey. They have done a survey of six thousand mines, out of fifteen thousand, and twelve hundred of them had in fact asbestos fibers, and we are talking about non-asbestos mines and mills, have asbestos fibers, and that's where we have to be very careful in defining...

DR. UFFEN: Did that survey include Canadian mines?

MR. DAHMEN: No, I think it's only U.S. mines, U.S. mining operations.

DR. UFFEN: So it's twenty percent of the mines examined, which may not include any Canadian...because we've got, you know, a big industry in nickel mining.

MR. DAHMEN: Well, no, it's an American study. It's published and it has been widely publicized in Tucson, at the conference there, and well, the problem is that we find if not asbestos, asbestiform fibers, in iron ore, copper, gold, nickel, in every mine, in fact, and we may wonder if, when we are regulating asbestos, if we are regulating it in all the mines, if we are regulating it only in asbestos mines.

What is happening is, that you look only for asbestos fibres in the asbestos mines. You don't look in the nickel mines. You are checking for other things there. That's due to our very bad way of treating things, studying one by one, and we are forgetting that those things are sometimes mixed.

So when we are pleading for a stronger implementation of whatever norms we have, we think are quite good. We are simply saying, check that also in other places. It is something which is important, because then regulating, for example,

MR. DAHMEN: (cont'd.) the transportation of asbestos means that you cannot transport iron ore either, because there are asbestos fibers. I was putting the question to American colleagues, saying do we close the border tomorrow.

Well, it's a health hazard, that's what you've said, you couldn't transport that, so do we close the border on iron ore, nickel and copper and so on. So that's not a reasonable attitude, I presume, and thus we were thinking of having those things also monitored sometime.

That's one of the points. Other things are very important. You raised the question of surface properties and chemical properties and so on, for the fibers. More and more we are still, and Quebec is very involved in this research on fibers to find out what is going on, and essentially we have been trying to find fibers that are non-cytotoxic.

We have developed one. It's non-cytotoxic, but we will have to go to animal experiments, we will have to go to everything, because it doesn't lead to any cytotoxic effect.

What happened in that fiber, it has been modified. It's still a fiber, it has all the qualities of a fiber, but it's modified. The surface properties have been modified.

Will it solve the problem of asbestos, will it rehabilitate asbestos? I doubt it. Simply it will help, certainly, but it is not the only questions that we can have. One of the aspects is that I think our main studies on physical properties. physical dimensions of the fiber, have shown effects. But you couldn't really say that physical dimensions are the only one that you have to do that. You have also to look at something else. So if we control, let's say, the toxicity aspect, do we still have a problem with the physical dimension of our fibers? If it is the case, this can be put under control. This is the fibrogenic aspect we will have to deal with.

If the cytotoxic aspect is under control, we

MR. DAHMEN: (cont'd.) will have what I hope will be the next future asbestos fiber that will have another name.

DR. UFFEN: Denature it?

MR. DAHMEN: Well, nature, you know, has to be changed sometimes.

DR. UFFEN: Is it...we have been informed about this research and it may be moving rapidly, it may not, but does it involve heat-treating the asbestos, or anything like that?

MR. DAHMEN: No.

DR. UFFEN: Or chemical treatment, or...?

MR. DAHMEN: Simply a...without giving any industrial...it's simply a treatment which...it's a phosphated fiber. It has been already tried in a different area, but not the way we have done it. The way we have, it has given very specific results that Dr. Dunnigan may have communicated to your Commission, but it's not the actual results. We are in the industrial testing of that. It's too early to really say hooray on that fiber.

DR. UFFEN: Thanks.

DR. DUPRE: Dr. Mustard?

DR. MUSTARD: In your brief, you make the point about substitutes having been assessed, yet there already has been a significant shift in the use of asbestos, particularly in the insulation and fire protection area. My first question is, do you have any estimates about any of those products in terms of their value in the system in comparison to asbestos? The substitute materials that are already in use for fire retardation, and the....any of the other substitutes you are aware of being increasingly used in the industrial world.

MR. DAHMEN: Well, yes, you had a big symposium on substitutes down in the United States, where in fact for every possible product with asbestos they were looking at a substitute and giving very good defined characteristics.

MR. DAHMEN: (cont'd.) What is interesting though, is that in no case do you have the same precise characteristics. It remains that asbestos is the cheapest one, and when we are talking about products and product...I mean asbestos-based products, finished products...since it is locked in, and I hope we will be able to convince people that when it is locked in there is no problem...in other words you have to really have it known that the problems isn't asbestos, it's asbestos dust...and more than that, it has to be respirable...if we would cease to use the word asbestos as such, which is really, you know, not a precise definition of what we are talking about...in that case, in those substitutes, we are still far away from using them...although there are some usages where we could probably do without it.

But for example, those tiles are most probably with asbestos. You could take one of them, have it expertized and we will find what...five percent, ten percent, most probably, in those tiles. These are asbestos tiles, too. Do you see any problem in having those things? The fiber is locked in, will not lead to any dust emission. And if it would lead in certain circumstances to dust emission, it will be of such a level that I don't think that...and I personally believe and I think that our government is convinced, there is no way this could be significantly affecting the health of the people, of the public. If it would have a doubt on it, it would be removed all over the place.

DR. MUSTARD: But let me take this...if I have a product which has many of the properties of asbestos, but does not have health effects, wouldn't there be a strong argument for its use as a substitute?

MR. DAHMEN: Well, it would be a substitute to asbestos, being asbestos itself, but it's true that we are looking in that direction. We are certainly looking in

MR. DAHMEN: (cont'd.) that direction for that kind of fiber. It has, in fact, maintained the qualities of the fibers, so at first it's very interesting. But we are far from, you know, treating thousands of tons. This has been done in laboratories with grams. When you start to work with thousands of tons, the problem is quite different. You have to test it, you have to go to a lot of testing. That's for the preparation.

From the medical aspect, you still have to go through animal studies, at least, to assess that carcinogenicity of the thing. It's not cytotoxic, but carcinogenic, I don't know. We still have to test for that. It will take two or three years. You know that. It's very long to test.

If it turns out to be all right, it's true, we have the best substitute for asbestos...modified asbestos.

DR. MUSTARD: But therefore, many of the substitutes then are being introduced without their reliability and safety having been assessed?

MR. DAHMEN: Well, you had an example of urea foam. It was accepted, you know, on the basis that you didn't know if it was dangerous. Why? Because you will not wait fifteen years before accepting a product, or thirty years to accept a product. So that was a good substitute for asbestos, and see what's going on now...formaldehyde. The Social Affairs Department said that's dangerous. Now it says it's a carcinogen, you know. The States also, it's forbidden in North America. It's still in use in France. I saw an advertising in a newspaper not one week ago on urea foam, you know, same advertising.

Well, we should try it, certainly.

DR. MUSTARD: Can I ask you one set of questions on the opposite side of this problem?

You are obviously here, this is the province of Ontario, not the province of Quebec. If Ontario should decide

DR. MUSTARD: (cont'd.) to take drastic measures like some of the European countries, and ban the use of asbestos, have you made any estimates of the impact in the province of Quebec?

MR. DAHMEN: Well, the impact in terms of production is not the impact we are looking for. Whatever measure will be taken in terms of the Ontario...the impact is that asbestos is not for Ontario alone to consider. It is a world problem, and thus anything taken in Ontario will be immediately reflected through the world scene and we will be discussing it.

Denmark has banned it. They did ban asbestos. Well, right now, we will be attacking that decision because we believe it has been done not for health reasons, but simply as a barrier to trade. They didn't have any asbestos. Why import fibers when we can have good fiberglass done at home? You know, that's foolish. It doesn't say that they don't care for the health of the workers, but they didn't have an industry.

In Sweden, we have met those people, we have discussed with them. They would ban it, but for the brakes, because they are making brakes and they need that for exporting Volvos, you know.

Should we ban introduction of Volvo in Canada because it contains asbestos in the brakes? That's a nice question we should ask.

But see, all those decisions that are taken are using health problems for some other use, and for economic reasons, too. And this has to be kept in mind, you know, that international trade is something quite different from health research, and it's a very, very difficult discussion you have with Swedish, because all the discussion were done with three parties - the government, industry, unions. We are all there. So we have the very unified front in front of us, but at the

MR. DAHMEN: (cont'd.) same time we realize talking, for example, of definition of asbestos in the iron ore, that the unions didn't have any knowledge that the government was making a study about the presence of those fibers in the iron mines.

So essentially we were saying things that we shouldn't have said at that time, saying they should look there, too.

DR. UFFEN: But you wouldn't ban crocidolite for a competitive advantage?

MR. DAHMEN: Well, you know...

DR. UFFEN: We wouldn't do that in Canada.

MR. DAHMEN: Even if you ban it, you will have to say, but for certain uses. I was thinking not purely in terms of commercial products. You still have need for crocidolite in some usages...pressure pipes, things like that... there is no way to replace them as up to now. Technology is very fast in our days, but there is no substitute yet.

But you have also strategic use, missiles use crocidolite and if it has crocidolite, you know, it's in there...well, the United States didn't mention it was asbestos in some of those silicate plates, ceramic, and so on, but it's crocidolite, most probably. I don't see how they could something else. But anyway...so it's called silicate, it has silicates in it.

DR. UFFEN: It's not fibrous.

MR. DAHMEN: It's not fibrous. Well, anyway, it's locked in, it's ceramic, in other words. This is no way this will come out, and when it is heated, as you know, fiber becomes something else. It has not anything to do with a fiber. About five hundred degrees centigrade you don't have any more asbestos fiber, you have phosphorite, you have a crystal, you have something else. Heating it is modifying the fibers. It's no more a fiber.

DR. DUPRE: Could I follow up in this area of substitution? I just wanted to straighten out a specific comment, in my own mind, that you have on page three of your brief, where you cite the United States EPA and state that it recognizes that a greater risk is involved in using any pipe system other than asbestos cement pipes to convey stable, nonaggressive water to consumers. And then you list the materials in order.

Risk to whom, Mr. Dahmen? Risk to the workers involved in making the pipes?

MR. DAHMEN: No, no.

DR. DUPRE: Or risk to the consumers?

MR. DAHMEN: We are talking about the risk of ingesting water that would contain fibers getting off those asbestos cement pipes.

DR. DUPRE: Right.

MR. DAHMEN: This was EPA region four. It has been followed by EPA region eight. It has been assessed in Michigan, too, and the same answer has come out. But it was, I must say, the first time the question was used, that product versus other products. Until now they were asking, is asbestos pipe dangerous. They were getting the answer, yes. When they said, but compared to the others, then they said well, it's a less risky one. But this was not really emphasized in the press.

DR. DUPRE: Do we in fact have any information on the relative risk to workers involved in making pipes out of these different kinds of material?

MR. DAHMEN: On asbestos cement plants, yes. We have data in England and...

DR. DUPRE: But in terms of the other materials?

MR. DAHMEN: In the other materials?

DR. DUPRE: Mmm-hmm.

MR. DAHMEN: Well, you have, I think, to go back to the study that has been done, I think in Connecticut...well, EPA has mentioned three studies, I think...if I could find the reference to those studies. Let me see.

DR. DUPRE Mr. Trudeau?

MR. TRUDEAU: Talking of relative risks to a worker, I did see...I did not participate in the writing of that report, but to try to answer your question, a worker is ...a worker working in an industry will be in the presence of several contaminants, depending on the production that they are doing. If you are doing...I don't know...polyvinyl chloride tubings, the worker may be in the presence of...I don't think he would be contaminated by...there is a difference between identification and evaluation, but let's only identify what it could be...try to identify what he could be put into the presence of. In whatever production lines a worker may be in the presence of various contaminants depending on the production, it is in the presence of asbestos products, there may be asbestos dust, there may be also noise, there may be resin, there may be cement dust in whatever other type of tubing. He may be in the presence of other contaminants.

If you are talking only asbestos dust in whatever...if there is no asbestos dust in a plant...if there is no asbestos product in a plant, you won't be in the presence of asbestos dust.

MR. DAHMEN: But I could find, Mr. Chairman, the reference to those studies done by the EPA, and because they were mentioned in one of the letters from the epidemiological division of the EPA research laboratories on asbestos, and they mentioned three studies, I think, that they had done to arrive at that conclusion.

It's true that in most cases it was other products that you need to use to connect those other pipes together that

MR. DAHMEN: (cont'd.) were eventually leaking into the water and being more dangerous for health, although they stated that the health risk involved with any kind of those pipes was still, I would say minimal, but they said very small...and for EPA to say very small after the campaign they had on asbestos, I think it's something.

DR. DUPRE: Any further questions?

Counsel?

Well, Mr. Dahmen, ...oh, Mr. Trudeau, please.

MR. TRUDEAU: If I might just finish about the definition of fibers, because I would like to stress a point that maybe the Commission should look at for further study.

When we define the asbestos dust, it's always defined with a method, using a method...like, the definition is different using light microscope, scanning electron microscope or transmission electron microscopes. Without going into the scanning or the transmission electron microscope...there will be expertise that will come to your Commission, as I saw in your schedule...but only for the light microscope, when you talk about fibers per cubic centimeters here in Canada, but in Quebec in particular, we are talking about dust as defined by the NIOSH method. But I would like to pinpoint that there are other methods that could make people...that could reach to other definitions because we find other concentrations, even with the light microscope, using different methods. The Asbestos International Association has proposed a method to measure the asbestos dust in the air, NIOSH has two methods - NIOSH I and NIOSH II. The English have a method, too, and the Australians have a method, and all those methods are different. So there is one thing that we should maybe work on mainly, is to get a uniform definition or to get a uniform method and then to work on a regulation, if we must, using that method. Because we must be aware that we are measuring

MR. TRUDEAU: (cont'd.) always an index of contamination by asbestos dust, and not the total asbestos dust... even with the most precise method. We are looking more for accuracy and precision here of an index than of the absolute concentration of whatever contaminant.

I just wanted to say that.

DR. UFFEN: That's a good point, because international definition, if we can get agreement, would certainly be important to us in any deliberations, because there isn't any international agreement. That's another story.

MR. DAHMEN: Well, as we know, through the Canada EC agreement there is a working group on trying to harmonize definition and method of measurement, and that group is under the direction of Mr. George Riley from the (inaudible)

Also, we have an agreement with the EC who have done that epidemiological study in the mining regions of Quebec, because we believe that if we cannot find any significant increase in the risk for the general population in those mining areas where dust is certainly among the highest level in terms of low environmental exposure, if we cannot find any there, I doubt if we will find any in the buildings or any possible measurable cases of health...asbestos-related disease due to exposure to the environmental use of products.

That's a conviction I hope we have transmitted to you.

DR. DUPRE: M. Pampalon?

MR. PAMPALON: I would like to have a word about environmental pollution and its impact on the public health in Quebec. I would like to say that in Quebec, three studies, including our own presented here, tried to weight the impact of environmental asbestos pollution of public air, and the results were all consistent and showed

MR. PAMPALON: (cont'd.) that among women residing in asbestos mining areas, very few of whom had been occupationally exposed to asbestos, there was no excess mortality. So no possible effect depicted that could be related to environmental asbestos pollution.

I don't know if you have a specific question on our study on that?

DR. DUPRE: Well, now, counsel, I believe that this study is included in the kinds of studies that we will be hearing testimony in our formal phase, is that correct?

MR. LASKIN: That's correct, Mr. Chairman, absolutely.

DR. DUPRE: We will be, then, looking at this in some considerable detail.

Bien.

(REPORTER'S NOTE: At this time Dr. Dupre spoke in French expressing his thanks to to the Quebec representatives.)

DR. DUPRE: Ladies and gentlemen, may we now arise for a brief coffee break, and reconvene in ten minutes.

THE INQUIRY RECESSED

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THE INQUIRY RESUMED

DR. DUPRE: May I now ask, please, for the representatives of the International Association of Health and Frost Insulators and Asbestos Workers to come forward?

MR. STEINFURTH: I would like to introduce first our vice-president for Canada, Mr. Al Kirton.

DR. DUPRE: Mr. Kirton.

MR. STEINFURTH: My name is Roy Steinfurth. I am administrator of the Insulators Health Hazard Program which is the Department of Safety and Health for the Asbestos Workers International.

In addition to the presentation which I had sent ahead to Linda, I would like to talk briefly about a few items that we've been involved in.

Number one is a most comprehensive study by Dr. Selikoff and his staff. It was done for the Labour Department and edited by Peter Bart, which I think will be available... although at this point I am not able to say because of the new administration in Washington. It was done for the Department of Labour, so I can't say when or if it will be available.

It involved an exhaustive study of the survey of asbestos and insulation workers in regards to compensation for asbestos-related disease. It's a thorough investigation of about a thousand deaths of asbestos workers in the United States and Canada, from asbestos-related disease. It covered one single occupation and was contracted for by the Department of Labour.

The goals of this study were to learn about the experiences of these diseased workers and their families, prior to and after their deaths from asbestos-related disease, what benefits were received and the problems in collecting these benefits.

I was also involved in this study as an advisor. I found it, myself, I think probably if someone would call Dr. Selikoff they may be able to get a copy of it..it's a most comprehensive and detailed report I've ever read. It involved a cohort of approximately seventeen thousand, eight hundred members of our union, beginning January 1, 1967, through December of 1966 (sic).

The Insulators Health Hazard Program was established

MR. STEINFURTH: (cont'd.) in 1973. This is the time I came on board. Due to the extreme amount of illness caused by...our membership was experiencing...we knew we had to do and get more involved and had to do something about the serious problems with our members' health.

We find out now the latest everybody has read, all the many, many different figures for cigarette smoking, we find out now the most recent one that is being accepted is the "nonsmoking insulator is ten times more susceptible to lung cancer than the general population"....five times, I'm sorry..."and the smoking insulator is ten times more susceptible to asbestos or lung cancer."

I'm not going to talk too much there. I do have some in here about the Workmen's Compensation. We find in most times, in most States, it's restrictive. Of course, I'm talking now of about fifty-three different plans. It is restrictive, and in many instances different clauses of it, especially the statute of limitations, are being found unconstitutional.

Now, the first one, they found different ones, was in the State of Colorado. The statute of limitations was established there, that it was unconstitutional, due to the prohibitive short time of reporting after you became aware you had asbestos-related disease.

Due to the restrictive and unconstitutional statutes, I assume most of you sitting here realize that product liability suits became rather popular in the United States. We find out now...and these are some of the latest figures of Dr. Selikoff...due to the younger rate of death in our organization...and I might add that we just lost two this week, forty-one years old, both from peritoneal mesothelioma. The average loss of wages is from three hundred and fifty to four hundred thousand dollars due to early death in our organization.

MR. STEINFURTH: (cont'd.) As far as OSHA is concerned, I believe you are all aware of the political ramifications of the different political administration, the new administration in the United States. They are going to try to regress, I guess is the word for it, in several fields. I am a member of the OSHA advisory committee for construction, and we finally do have a meeting pinpointed for Wednesday, by the way. It has been postponed three times. We going to have a meeting.

They are to stay part of the lead statute. Of course they have stayed the cotton standard, the cotton dust standard. They are also going to try to issue stays on several other existing standards and regulations.

One thing that we do advise our members in very strongly, our local unions, is to be careful of the contract language they put in their working agreements. Care must be taken over the proper wording because of the liability of our unions.

There has been cases where many of our unions have been...not many, several of not our unions, other unions, have been sued because the contract language wasn't worded properly.

We do emphasize the importance of autopsies in the event of death, because many times it means the difference for the widow and/or the member's children, the difference of Workmen's Compensation or nothing.

We are getting involved, as I explained in my other presentation, in the early cancer detection and cancer-prone members, an examination program. We are funding this through the Health Hazard Program. We don't know exactly what it's going to cost. So far we estimate in the vicinity of about a million dollars for about five thousand workers.

We feel that, medical scientists feel that there is

MR. STEINFURTH: (cont'd.) a possibility that there may...they may be able to reinforce or strengthen the natural immunity in the body. This is going to be the slant. There will be many, many more blood tests involved in the examinations we are going to give, to see if we can prevent the starting of cancer, let alone the cure...prevent it before it ever starts.

We estimate in the United States there's about five hundred million tons of products that contain asbestos that have to be removed. The reason we have come up with that figure is, unless we were using asbestos cement years ago...and I've been a member since 1941...most of our products only contained about fifteen percent asbestos.

To give yousome idea of one job, a large coal burning facility today...the last I worked on was in 1973 or 1972. It took about a hundred carloads of material per unit and most of this was only fifteen percent asbestos. A lot of it was also mineral ore, so this is where we get our estimation of five hundred million tons.

We are running into another serious problem with our members. We have more than doubled the suicide rate of members over sixty years old.

Now this is very easily explainable. We see it every day. I had one of these come across my desk two weeks ago, a letter from a widow who lost her husband from suicide, because of their advanced deterioration of their health, their worry over whether or not their family is going to be properly cared for and so forth. We find out our members experience over a two times as serious suicide rate over the general population.

Again I want to stress we are finding a lot of people dying from mesothelioma, etc., cancer and so forth, and at a lower age. When the original OSHA rulings set the five fiber count in the United States, they didn't address the cancer

MR. STEINFURTH: (cont'd.) problem. They were only addressing the asbestosis problem. They didn't know the cancer problem, at that time, how serious it was. It has now become evident that it's much more serious than asbestosis, asbestosis being the least dangerous disease our members suffer from.

Wives and children, we're having a very bad experience with wives and children contracting asbestos-related disease. Most probably the two forty-one year old people, members, who died last week, contracted that about the age, we estimated, about the age of fifteen years old.

The track record for Department of Labour records for occupational disease, Workmen's Compensation is only five percent in the United States are being paid Workmen's Compensation for all types of occupational disease.

I think our...at the lastest publishing of this report...ours were running about forty percent. You have to remember this old cohort that started in 1967 through 1976. This is the period when the dangers of asbestos started to really manifest, so now it is much more easily accomplished than it was in years past. We have seen whole breakups of families, divorces, and like I mentioned before, suicides, as a result of asbestos-related disease.

One more little item I would like to say before I close, and I hurried up and scribbled it on the back of this, we do have one documented case of cancer of the tonsil, which occurred here in Toronto about five years ago, from a man who was exposed to cutting asbestos pipe for installation. He had four days' exposure.

We have had other cases from less than one day's exposure, and many, many more from one to three months' exposure, of asbestos-related disease.

So what I'm trying to say is, it's a very, very serious problem for us. It has been in the past, it will

MR. STEINFURTH: (cont'd.) continue to be in the future. We, as an international, so far have donated almost two million dollars for research, and that is quite a little bit of money for a small organization of only twenty thousand people.

The fund that I administer is paid separate into the Insulators Health Hazard Fund, and is strictly for that purpose. It's for education, legislation, and research.

I guess I've talked about long enough. There's many more items and probably you may have some questions, I hope you do.

DR. DUPRE: Thank you very much, Mr. Steinfurth.

Mr. Steinfurth, you mentioned very early on in your opening remarks this study conducted by Peter Barth and Dr. Selikoff, is that correct?

MR. STEINFURTH: Yes.

DR. DUPRE: You were involved in the steering committee for that study, is that correct?

MR. STEINFURTH: Yes.

DR. DUPRE: Were you satisfied with that study and the way it was conducted, from what you have been able to see so far?

MR. STEINFURTH: Yes. The only thing that I object to in the whole study...it was the most thorough I've ever seen... in fact, I objected to some parts of it where I think it dug a little too deep into the widows' financial worth.

What I'm trying to say there is, if she managed, if they managed to own a house or have ten thousand dollars in the bank, he investigated all this and I advised many of our members to not answer that part of the examination.

I realize the worth of it, but I realize that political hay could be made where here was a trade where a man could save so much money, what was he worrying about. I've been hit with that many, many times.

DR. DUPRE: But you do commend that study to us?

MR. STEINFURTH: It's probably the best I've ever seen.

DR. DUPRE: We...the Peter Barth that you are referring to is the Peter Barth of the University of Connecticut?

MR. STEINFURTH: Mmm-hmm.

DR. DUPRE: You are aware that he has agreed to do some work for us?

MR. STEINFURTH: Fine, fine. That's very good.

DR. DUPRE: I'm glad to hear you register that approval, because we felt it was quite a coup to be able to get him to come along. I appreciate that.

Could I perhaps, on the basis of your written remarks, just ask if it's possible for a little elaboration that would have some local colour to it, so to speak.

MR. STEINFURTH: Okay.

DR. DUPRE: For example, you point out that planning is now being finalized for an early cancer detection program and this will include thorough, revised physical exams for all your members in the United States in Canada who have had over thirty years of experiences in the industry

When would it be likely that this program would start being implemented in Ontario, and do you have any idea of roughly how many people would be involved, would be touched by this program in our jurisdiction?

MR. STEINFURTH: I have the figures for Canada in my briefcase. I brought them along, thank God.

We should have got started six months ago. However, due to the new administration, we had the services of a mobile laboratory spoken for, through NIOSH, and since that happened they fired all the technicians and drivers and so forth, so we are now...my general president has written a letter to

MR. STEINFURTH: (cont'd.) Schweiker, the new secretary of HEW, and also I have enlisted the aid of a congressman to try to get these technicians. If we can't, we will hire them directly. We will try to get some names of some, and if we can't get the use of one of their diagnostic labs we will buy one of our own.

I can see the day coming when we are going to need it anyway.

I am just looking through here for Canada, and I can't find the page. But we intend to ...I don't have it here, I'm sorry. I don't have a page for Canada. Isn't that something.

But we intend to start first in Boston, and work our way west. So in all probability...we are going to have three sites in Canada. First of all, we are going to take Vancouver down to Seattle, the local in Vancouver. We are going to establish one in probably Edmonton, one in Quebec and one here in Toronto.

The other local unions will furnish their transportation to bring them...probably the eastern provinces.. to Quebec.

The other ones involved, there's really not that many members in some of the locals, they are small locals. We will probably pay their transportation for them to get to the proper city.

But we intend to start this and we want to have it all completed, and of course the results of this will go to the whole society. What I mean is, they will be available to everybody.

We are not just limiting it to thirty-year members like that says. If we have a man who is over fifty years old, we are going to look at him...as well as some younger members... and we are also going to look at anybody who knows they have an

MR. STEINFURTH: (cont'd.) existing problem, so it may, that figure may be small. We may be looking at more.

The blood results will be flown back daily to Mount Sinai, where the hemotologist will process the blood.

We also think now, some of the scientists not only there but in other medical colleges, think that the thymus gland may have something to do with this because this also builds up an immunity to disease, so they are now working on being able to make thymocin synthetically, much as they are interferon. These prospects will be looked into also.

So we figure...we are just hoping and praying we are able to save some lives. We realize we haven't been getting to our men quick enough with examinations. By the time we see cancer, most times it's too late. I think the cure rate for lung cancer in our organization, probably isn't much better on the outside, is about ten, maybe twelve percent.

DR. DUPRE: So the idea here is that you are going to chronologically, you are going to start in Boston and then move around the continent?

MR. STEINFURTH: Yes.

DR. DUPRE: What is roughly the starting time for Boston?

MR. STEINFURTH: For when?

DR. DUPRE: For Boston? When will you be starting in Boston? This next month, next year?

MR. STEINFURTH: Well, it was supposed to be this fall, and I have every reason to believe...although this diagnostic lab availability is pushing us back...I have every reason to believe it will still be this fall, somehow...if we have to subcontract it.

Now the x-rays, ordinary x-rays and everything, I understand in Canada are done as part of the law for our people, so we realize we won't have to...we can use the existing

MR. STEINFURTH: (cont'd.) x-rays for all our members in Canada.

But the blood work will be done by a team from Dr. Selikoff's school of Environmental Medicine...the way I understand, unless he has made arrangements here in Canada. I know he is supposed to be working this out.

DR. DUPRE: Dr. Mustard?

DR. MUSTARD: Can I ask you a question? I take it from your comments that initially there is some indication that you would have had U.S. government funding to support this project, is that correct?

MR. STEINFURTH: Dr. Selikoff was attempting to, and I'm not sure but what he didn't give some funding for it. The mechanical part of it, we are paying for.

DR. MUSTARD: So if the new administration has cut off that funding to Selikoff, you are planning to make that money available yourselves to carry the cause?

MR. STEINFURTH: We are going to...if it has been cut off, we are going to have to.

DR. MUSTARD: Do you have any idea what the cost of this program is?

MR. STEINFURTH: Not altogether. Not the part of the work that will be done in his labs up there. No, I don't, and I don't know whether he has yet or not. I'm sure he has a figure on it, but I have a meeting with him set up for not this week, the following week, and we intend to find out then.

DR. MUSTARD: I would be intrigued to know if in setting this up you had any discussions about whether early recognition of cancer would indeed change the outcome. My question is really posed...let me pose it to you this way: If you can detect cancer at age sixty and you have five years to live from it, that means you will die at sixty-five. If your cancer is detected at fifty-five, but you don't have an

DR. MUSTARD: (cont'd.) intervention which will change the outcome, you will simply live...you will have a longer from point of diagnosis, but the net effect is still no gain.

Were you given any evidence that there were any interventions that could actually be applied to early diagnosis of cancer, that would have a better outcome?

MR. STEINFURTH: Yes, yes. The way he describes it, and the way I can best describe it is, they think they may have the capability of who in later life will have cancer, who doesn't have it now. This is the slant they are taking.

In other words, those that will not necessarily be our older members...we are talking now about our younger members.. they may be able to recognize who, in early life, may come down with it later in life. This is why the difference in blood tests and the thymus gland and so forth. This has been his whole argument. Not so much the early detection. We know we are going to find a lot of cancer, we know this, in our older members, but the thing that he and other scientists, and he sits on the National Cancer Board in Washington, and so forth...I'm sure you are well aware...think that they may have the capability to determine who in later life is going to have it.

DR. MUSTARD: Okay. Let me change the questioning slightly. Your union has obviously had vast experience with a major problem, but as we were hearing earlier this afternoon in another hearing, the use of asbestos is changing. I would take it now that very few of your workers would be actually exposed to asbestos in the workplace. Am I right in that assumption?

MR. STEINFURTH: No, no. You are...we are probably...

DR. MUSTARD: If you could explain to me how they would be exposed nowadays in terms of...

MR. STEINFURTH: We are getting involved so much in demolition, maintenance work and repair work, and we are getting involved in a lot of demolition work, asbestos ripoffs and so forth, not only in the shipyard industry but also...even in schools. It appears...we now going up and stripping this ceiling, if it's plastered asbestos, we know that isn't our work, but we are starting to get involved because there are so many trades that are afraid to touch it. So they are involving...we are getting involved...with the proper equipment, of course, but we would rather get involved as skilled mechanics than the other side of the coin. There's many, many fly-by-night contractors, I guess you could call them, that are going in with high school kids and no protection, and stripping not only ceilings, we have caught them in shipyards even cutting out whole lengths of pipe with asbestos...taking them out on the dock and hiring young kids out of high school, just out of high school or still going to school...to strip the asbestos off. We are...in the industrial work we are involved in a lot of removal and repair work.

I don't want you to think that we are not exposed less, we are exposed less, because we went relatively asbestos free.

DR. MUSTARD: I wonder if you could explain to me how you make sure the members of your union understand how to ensure that their work sites, when they are doing this, that they have minimal exposure to asbestos? I presume you have a program for this?

MR. STEINFURTH: We have a program for that. We insist on the...you can have all the so-called engineering controls you want, but we have to insist on the proper clothing and the proper respiratory equipment, and we take the position that any demolition with our members should be done with an air-fed respirator. No, we will not allow them in asbestos

MR. STEINFURTH: (cont'd.) removal to use a replaceable or disposable respirator. I understand NIOSH now is...they were thinking of banning the single-use respirator or the disposable cartridge type, because most times they weren't being fit properly for it. The quantitative and qualitative fit was not being performed, so they recommended the use of air-fed respirators.

DR. MUSTARD: What happens when you have a potential contract for a building which involves either replacement of asbestos or demolition, and two or three organizations are bidding for it, and one of the organizations is unionized by your people...who obviously would ensure that the contract called for the proper controls...and the other outfit is led by an individual who isn't unionized and doesn't have to pay any attention to the controls? What happens there? Is this a problem for you?

MR. STEINFURTH: Yes, it is. It's a very serious problem. I think you'll find out economics play a big part in this. But slow but sure we seem to be gaining a lot more work in asbestos removal, even though there's many so-called fly-by-night outfits, cheaper labour and so forth. We seem to be getting more and more of this work.

In fact, in Philadelphia, we had two hundred people involved on one project just removing asbestos, which is a large group for asbestos workers, but I can agree in the nonunion side or just the pickup crew, there is a lot of this going on.

It's difficult for OSHA even to even screen or find all these sites, so it is a very serious problem.

DR. MUSTARD: Can I just pursue a couple more questions on this?

DR. DUPRE: Please.

MR. MUSTARD: In the United States, the major

DR. MUSTARD: (cont'd.) legislation is federal, for controlling this?

MR. STEINFURTH: Yes.

DR. MUSTARD: If the new administration weakens the impact of that legislation, what strategies would you use to ensure that the standards are maintained in the workplace? Have you thought that through?

MR. STEINFURTH: I think you are going to hear the biggest holler south of the border you ever heard in your life. I think the public and the labour unions are going to...and I think I refer to it in here rather weakly...I think the public and the labour unions are going to cause such a ruckus that they are going to have to take a second look at it. There's just too many people...for instance, we know that while our trade might have the highest percentage of people dying from asbestos-related diseases, many other trades have more in number dying, and don't know that it's from asbestos-related disease. So I think you'll see labour using the tactics that they become famous for. I guess that's the most tactful way to put it.

DR. MUSTARD: In other words, you would put it in the adversarial context?

MR. STEINFURTH: Yes.

DR. DUPRE: Dr. Uffen?

DR. UFFEN: Yes, I've got one that I found interesting. You mentioned it twice in your written report about the need to investigate the true cause of death. For those of us who are not medically trained or anything, it comes as a bit of a jolt that, the possibility that the cause of death isn't the correct one. Could you elaborate a bit on this?

MR. STEINFURTH: I would be glad to. We estimate that...and we explain in here...that each death is investigated fully by Dr. Selikoff. We estimate that it might be as high as one-third of all death certificates that have to be changed as

MR. STEINFURTH: (cont'd.) to the true cause of death.

DR. UFFEN: Is that in the States, or would that include Canada?

MR. STEINFURTH: Both countries. We find out... this is due for several reasons, and I don't mean to, again, to blame the medical society for this. There are so many that... and rightfully so, they have to have a reason for death...and they put pneumonia or they'll put emphysema, severe emphysema, congestion of the lungs, bronchitis, and so forth. But when the...if they don't...if we don't have an autopsy, that explains the need for it. If we don't have an autopsy, then many times the widow is unable to draw Workmen's Compensation. So this is why we insist, and this is part of all of our speaking engagements and so forth, in front of our local unions, that we do insist on the proper autopsy.

Shortly, in the near future, this protocol for an autopsy will be printed in our journal which is sent to all of our members, the proper protocol to follow, because we have received several autopsies that weren't...just didn't cover the subject as clear as it should have.

Then there's many, many doctors...you have to realize...there's many doctors never see a case of asbestosis or asbestos-related disease. A lot of them don't, and they are not well versed in it.

DR. UFFEN: Can one doctor overrule another and change the death certificate? I think there has to be some...

MR. STEINFURTH: Well, he would discuss it fully with the doctor.

DR. UFFEN: With the original?

MR. STEINFURTH: Oh, yes. Oh, yes. This is all done with the original doctor, and explained, and they work together on it. There's never any trouble over it. It is mutually

MR. STEINFURTH: (cont'd.) agreed to. He works with the doctor.

The same applies with him, if I get a very, very seriously ill member, he will work right along with the doctor... him or some of the specialists at Mount Sinai, Dr. Howland, several other ones, work along with the doctors, advise treatment and so forth...especially if the man, the doctor doesn't happen to be experienced. Or they will find a doctor for him to work with in the near vicinity. There is a spirit of co-operation.

DR. UFFEN: You gave what seemed to me to be an enormous figure...something like thirty percent of the death certificates get changed?

MR. STEINFURTH: Many, many...yes, yes. It's changing now, but in the past it has been an awful high figure.

DR. UFFEN: What about the number that might have been wrong, but nobody has done an autopsy to overrule the original one? Is there any...

MR. STEINFURTH: Well, all I can say is, every death is fully investigated and if there hasn't been an autopsy, and it would depend on that, then that's one that we lost.

DR. UFFEN: This worries me for a couple of reasons. The obvious one is the impact on widows and so on, which you have made quite clear. But I'm beginning to wonder, does anybody know the impact on the medical statistics? I would guess that people who compile statistics about health-related disease and death would rely on a death certificate, and if a lot of them are wrong are the medical statistics fundamentally wrong?

MR. STEINFURTH: Well, in many cases they are. I had one come through the other day, the cause of death was pending on the death certificate. It said on there, pending. I have since found out that the cause of death was lung cancer.

DR. UFFEN: Would your union be able to present us with any kind of documentary data supporting what you've just

DR. UFFEN: (cont'd.) told us, that we could follow up?

MR. STEINFURTH: I think so, I think so. It would probably have to come mostly from Selikoff's office. Every investigation he does is all correlated with the x-rays and put together...not the x-rays, but in hardbound volumes. He has three libraries in case of fire, but they are all correlated. I think we could work with him. I think Dr. Selikoff would be more than willing to work them.

DR. UFFEN: Thank you, sir.

DR. DUPRE: Counsel, did you wish to say anything?

MR. LASKIN: I think there are some published articles which indicate the margin of error in death certificates, and particularly Dr. Selikoff's work.

MR. STEINFURTH: We have had problems, especially since I've sat on the OSHA advisory committee, of contractors going into an area where there's not many doctors, and doing a large job...where they can't even find a doctor for first aid. They have to sometimes haul them sixty, eighty miles to another town. They just don't have the manpower. So it's easy to see how they would not be able to get a doctor who is skilled in occupational disease, very easy to see.

DR. DUPRE: Mr. Steinfurth, if I could switch, perhaps, to another area, one that you were getting into with Dr. Mustard, I am very, very interested in school asbestos control programs where, as you know, at least on the basis of what we have heard so far, there appears to be a good deal of unevenness...let's put it that way..in terms of the extent to which safety precautions are taken to protect the health of the removal experts. Within any given jurisdiction there seems to be a great deal of unevenness, perhaps due to contractors, perhaps due to government inspection, perhaps due to any of a

DR. DUPRE: (cont'd.) number of causes, but there seems to be a great deal of unevenness in the extent to which proper occupational health precautions are followed.

Now, from your knowledge of asbestos control programs, can you think of a state jurisdiction in the U.S. which you could, say, hold out to us as a model of how proper occupational health standards were adhered to in the course of removal programs in schools...or control programs in schools?

MR. STEINFURTH: I can think of a state that adopted what I considered a good program, but they did not include encapsulation, and I think most likely that's probably the most economical way to do it for now, encapsulation. But for asbestos removal, the State of New Jersey did adopt a bill.

Of course, the usual economic problems are there also. Our members are doing a lot of the work, but I'm sure there's a lot of other people doing it also, but they do have...the State of New Jersey does have such a plan.

New York, I've been trying to help them somewhat in a similar plan, but our main concern so far in New York is trying to, first of all, trying to improve their Workmen's Compensation Program. I think we are going to be successful in that, but they are starting a school, a so-called school removal program, and we will be helping with that.

But New Jersey has one that is adopted.

DR. DUPRE: Now, in New Jersey they had this program which, as you would put it, has built into it various measures that are meant to protect the occupational health of a control worker.

MR. STEINFURTH: Mmm-hmm.

DR. DUPRE: Now, from what you hear out of New Jersey, is this program which is there and which has regulations, in fact being followed?

MR. STEINFURTH: Yes, it is. By our people it is being followed very, very closely.

DR. DUPRE: And they are satisfied as to the relative uniformity of enforcement?

MR. STEINFURTH: Yes.

DR. DUPRE: That's very interesting.

You mentioned encapsulation as distinct from removal, and of course you know I'm generally aware of the economic argument, of course, that can be made from time to time that encapsulation is the cheaper of the two control measures. Putting aside the economics for the moment, and thinking solely of the possible health hazards to a control worker, is there a choice to be made there between encapsulation as distinct from removal? Does encapsulation involve less exposure and danger, or is it all about the same when all is said and done?

MR. STEINFURTH: Well, I think with the proper encapsulation materials, and there is one new one on the market now, and I'm not even going to bother pushing it because I'm not in that business, but I will mention that it is a method of cold pouring any known metal, except stainless or galvanized, or spraying it like paint. I think that would probably have to be the answer, something where there would be...if you did have a moisture problem, you wouldn't have to worry about it coming down.

As far as the various sealants and paints and so forth that are used, they probably work all right unless there is a water problem, and then again you are going to have a problem. So the reason I mentioned encapsulation was this new product that I think is going to go places. It's just at the starting stages right now, so to speak.

The EPA is very interested in it. In fact, I've been involved in it, trying to help the EPA with it. Who knows what's going to happen with the government situation in Washington now.

DR. DUPRE: Any further questions?

DR. DUPRE: (cont'd.) Well, may I, sir, thank you very, very much, and Mr. Kirton, for appearing before us this afternoon.

MR. STEINFURTH: I thank you for the privilege.

DR. DUPRE: Thank you indeed, sir.

---the delegation retired

DR. DUPRE: Is Mr. R.D. Olson in the room? Mr. Olson?

MR. OLSON: Gentlemen, I have some slides to use along with the presentation. I'm not sure whether you have...

DR. DUPRE: Thank you, Mr. Olson.

May I first mention to the members of the audience that Mr. Olson is the Manager, Industrial Hygiene, for Dow Chemical of Canada Limited.

You are extremely welcome, Mr. Olson, and indeed we are in your hands for any mode of presentation you wish to follow.

MR. OLSON: Thank you. I'll put this on.

DR. DUPRE: Do you wish the Commission to simply change places so that we may watch the show?

MR. OLSON: Please.

DR. DUPRE: Thank you.

MR. OLSON: I have an extension on here. I am assuming the gentleman is recording it, so if he wants to...

Gentlemen, the presentation I'm making will pretty much follow the written submission which we made earlier. As you are aware, we are Dow Chemical of Canada Limited, and probably best known to most of the people in Canada through our Saran Wrap, styrofoam insulation and other commercial products.

We've got a fairly sophisticated health and safety program, and have had for several years. Our involvement with

MR. OLSON: (cont'd.) asbestos principally revolves around the electrolytic cells in our chlor-alkali production. We'll talk a little more about these cells in a moment.

We do have some miscellaneous exposures in old insulation that was put on the pipework prior to the early seventies. We are still using some transite pipes and sidings, and asbestos in gaskets.

The use of electrolytic cells for the production of chlorine and caustic, and they are both produced at the same time, is, as I indicated, mostly in what we consider chlor-alkali production. Last year, being 1980, and these are estimates, the Canadian chlor-alkali production of chlorine was about one and a half million tons of chlorine. Ninety percent of this was produced in asbestos diaphragm cells. The other ten percent, the majority of the ten percent was produced in mercury cells, the other small amount in other very limited research operations.

Approximately, in 1980, this production of chlorine utilized three hundred and fifty tons of asbestos, most of that being chrysotile asbestos.

The diaphragms in our chlor-alkali cells separate various materials...and I'll show you that in a little more detail in a moment...but the separation of the diaphragm is chosen for its mechanical strength, its chemical resistance, and the next is very critical - the optimum energy efficiency. Because chlorine and caustic are made by electrolysis, the utilization of electrical energy, we need to get the optimum energy efficiency. We need to find a material that is uniformly depositable across the face of the cell, a material that allows percolation through it, and one that has a fairly long service life.

I think this is an example, a very simplified diagram, of a diaphragm cell, and if you don't mind if I go up to the board, the diaphragm cell contains brine, which is

MR. OLSON: (cont'd.) sodium chloride solution. Fresh brine is brought into the cell, electricity is placed across the anode and the cathode. The surrounding segment here is the separator, or the diaphragm. In this case, it is an asbestos diaphragm.

The electrical energy being put into the system allows the chlorine ion in the cell, or in the brine, to migrate to the anode, and that is given off as chlorine gas.

The cathode produces hydrogen from electrolysis of the water, and that also yields the hydroxide of the OH ion.

The percolation through the asbestos we talked about a few minutes ago, this percolation of the sodium ion into the...through the separator into the cathode, which results in sodium hydroxide.

For those of you who are chemistry professors, you can excuse my simplified diagram.

We have at present...and we feel it's a fairly strict asbestos control program...utilizing several exposure control systems. First and foremost, the existing and proposed Ontario regulations.

The chlor-alkali industry guidelines set up by the Chlorine Institute...the Chlorine Institute was originally set up in the 1940's to look at the safety of use and transportation of chlorine. That has since been expanded to look at the mercury exposure abatement program, and also the guidelines for proper handling of asbestos.

We also have a series of internal regulations and pardon the slide, it's a little bit out, but this is a Sarnia Division asbestos safety standard you can see, utilizing fifteen different segments telling us how we should use asbestos and all of the controls that should be used during the operations.

That involves both the asbestos diaphragm cell production as well as other operations involving asbestos.

MR. OLSON: (cont'd.) A little bit on the need for chlorine...these again are Canadian estimates...the million and a half tons of chlorine produced were used in approximately...as I say, this use estimate profile...about twenty-five percent in plastics, ten percent in solvents such as the perchloroethylene that is used to dryclean clothing, seventeen percent used in other organic chemicals, inorganic chemicals, pulp and paper bleaching..and pardon the misspelling, that should be E A...about thirty percent of the chlorine is used in pulp and paper bleaching. Then needless to say, water and waste water treatment uses about six percent for purification of the water.

Caustic use estimates - about thirty percent in diverse chemicals...and this is the use of caustic to produce other chemicals such as pesticides, insecticides, items like that; pulp and paper, about ten percent of the caustic is used in pulp and paper, and so on down the list.

We think that we have our exposures under control. We have been monitoring our asbestos exposures for over the last ten years. We feel that the exposures in our chlor-alkali asbestos diaphragm operations are well under control to levels which will not cause adverse health effects.

We are well under both the existing Ontario guideline and the proposed Ontario guideline.

I've just got a few slides of how the operation works, and how we handle the asbestos.

Once the asbestos is brought into the plant, it's obtained or received in the large cardboard box which you see, the operator places the asbestos bag on the conveyor, which takes it up to the top of the run.

This is a little closer view of the containment facility that is at the top of the conveyor.

The asbestos progresses into the container, the man who is on the job puts his hands into the..essentially a glove box, slits open the bag of asbestos, shakes it, the

MR. OLSON: (cont'd.) asbestos drops down into a slurry tank where it is mixed with caustic and with water, and that box is ventilated to an air filter and the air is filtered before it is released to the atmosphere.

Even though our exposures are under control, we require that the man put on disposable clothing and wear the respirator during these operations.

During operations of a chlorine cell...and if we went back, think back to the simplified drawing...during operations that asbestos diaphragm can get a hole in it. This can be plugged by dumping asbestos, an asbestos slurry into the chlorine cell, to a certain extent. Once the cell is very holed there is nothing you can do about it and you must take the whole series down and repair it.

But the bag is placed, again, in a modified glove box, the man slits the bag open, adds water to it and makes a slurry of it. He then puts the slurry into a bucket, the bucket is transported and poured into the top of the chlorine cell.

I guess the gist of our...that's the last slide, but the gist of our presentation is that chlorine and caustic are very vital to society and to the chemical industry. They are two very cornerstones of the industry.

At present there is no alternative to asbestos chlorine cells...asbestos chlorine diaphragm cells. There are some small scale alternatives, but at present they are not available for large scale chlorine production. We do feel that we have our asbestos exposures under control, and we do not feel that there are any levels there which are going to cause our employees any adverse effects.

Really, that's the end of the presentation, so if we can get the lights, I would be happy to try and answer some questions.

DR. DUPRE: Thank you, Mr. Olson. Would you forgive me for a moment while I try to recover from temporary blindness, with the light being turned on.

If I may just open up the line of questioning, Mr. Olson, I found the presentation most instructive, particularly when you turned to some of the slides that show us workers in the workplace and how they are handling asbestos.

Could I ask the following: When we saw some of these asbestos bags lying around, are they ever handled through the use of forklifts and so on? If they are, how careful are you to try to ensure that the bags are never broken open?

MR. OLSON: Dr. Dupre, the boxes themselves, you may remember the box on the pallet...

DR. DUPRE: Right.

MR. OLSON: ...that entire box is unloaded from the delivery truck directly into that building where you saw them. What you couldn't see from that slide very carefully is, the storage for the asbestos is in the same building, it's just further down the building. So the only time that they are handled by fork truck is when they are taken off the truck, and then when they are brought up to the conveyor line.

The people who...the operators who run the fork trucks are those operators who do the unloading of bags onto the conveyor line. They are well versed in the potential hazards of asbestos, and they are very careful. If indeed they do rupture a bag, they have been instructed to stop immediately and repair the bag before they move it any further.

There are vacuums, internal vacuum cleaners accessible to them so they can clean up any asbestos immediately, and something that I might add is, once they are done with that operation that you saw, that entire area is washed down.

DR. DUPRE: Could I just ask the following: You must have a joint labour/management health and safety committee

DR. DUPRE: (cont'd.) at the Sarnia operation, do you?

MR. OLSON: We have had one since about 1970, predating the law.

DR. DUPRE: Is the Sarnia plant unionized?

MR. OLSON: Yes.

DR. DUPRE: What is the union?

MR. OLSON: It's the Energy and Chemical Workers.

DR. DUPRE: I see. Do you have any general observations on the relative success of the so-called internal responsibility system in your plant?

MR. OLSON: By internal responsibility, you are talking about the joint committee?

DR. DUPRE: The joint committee system and everything that goes with it.

MR. OLSON: Our committee has been used to audit the operations of the plant. Our philosophy has been that the plants have total...the line plant or the plant that is producing the material, for instance the chlor-alkali plant, has total responsibility for the safety and the industrial hygiene aspects of its operation, and that cannot be delegated to anyone.

We started our monitoring and we have had a real active industrial hygiene program in Sarnia for about the last ten years, and really we have used the joint committee as an auditing function to ensure that everything is progressing fine.

We have used it as a sounding board for if an employee in that workplace feels that something is not going the way it should, that word comes back to our committee and we can then make sure that the industrial hygiene function and the line management function are doing the right thing.

I believe the way that we are doing it and have used it works very well. In fact, we just ran an audit of that plant about a week and a half ago.

MR. OLSON: (cont'd.) We feel that this joint function works well.

DR. DUPRE: Dr. Uffen?

DR. UFFEN: In a lot of the presentations that have been made to us, it's clear that the monitoring system is measuring, air monitoring, particles per cubic centimeter and so on.

Do you have any air monitoring controls?

MR. OLSON: We do monitor asbestos counts in the air, yes.

DR. UFFEN: Continuously, or spot checks or...?

MR. OLSON: There are a couple of ways that we do this. One is the eight hour time weighted average for the entire shift, where the man carrying out the operation will wear a pump and a cassette monitor for the entire day. But what we have also done is, at those operations where we feel there may be short-term peak exposures, we will take a short-term, high-volume air sample at that point, to see what it is for that short period.

So we have used both monitoring techniques.

DR. UFFEN: Do you have your own identification and measurement, or do you have to send it off to a lab someplace else?

MR. OLSON: We do our own asbestos fiber count, yes.

DR. UFFEN: In Sarnia?

MR. OLSON: In Sarnia, yes. We have an industrial hygiene group in Sarnia, consisting of three industrial hygienists, besides myself, and we do our own asbestos counting.

DR. UFFEN: Do you have an electron microscope?

MR. OLSON: No, we do not use an electron microscope. We use a light phase contrast.

DR. UFFEN: I was thinking when you gave the

DR. UFFEN: (cont'd.) presentation, how long does a cell last before you have to replace it, and what happens to the remains?

MR. OLSON: This really depends on many, many, many factors, and I guess I can't answer your question because I am not technically from the plant. What happens is, the electrical usage or the electrical demand by an individual cell grouping will increase with age, and your yield of chlorine for the amount of energy that you are putting into the cell will decrease. At a certain point, that's when they will say, we have to take this cell series down, and take the old asbestos off and put new asbestos on, clean up the electrodes and such.

DR. UFFEN: What do you do with the old asbestos?

MR. OLSON: Okay. What we do is, we have a high-pressure water system that washes the old asbestos off of the cathode. That goes down into a tank, and it goes into a pond.

The asbestos and the mud from the bottom of that pond is picked up and taken out to a Ministry of the Environment qualified landfill area. The water from the pond is recycled down into our salt wells, where it picks up fresh brine and brings it back to the surface.

We have pretty much a recycle system.

DR. UFFEN: Into the wells?

MR. OLSON: Yes.

DR. UFFEN: Oh, how interesting. What are they, about a thousand feet or so?

MR. OLSON: I'm not sure. I really can't tell you, I'm sorry.

DR. UFFEN: Do you ever lose any water?

MR. OLSON: No. The...I guess I can't tell you exactly either. I know that the caverns are good, and I'm out of my field right now.

DR. UFFEN: Do you ever mine that salt again after the water has been circulated through it?

MR. OLSON: Do we ever mine it?

DR. UFFEN: Well, the salt beds in the holes you've got there must have been to mine the salt originally, eh?

MR. OLSON: Yes.

DR. UFFEN: Do they take it out by pumping water down, hydraulic?

MR. OLSON: That's what we are doing with that overflow water from that pond. We are taking it down to dissolve the salt out, and bringing it up with fresh brine...

DR. UFFEN: Does anybody monitor to see whether there is any asbestos fiber in the salt when you bring it back up?

MR. OLSON: I'm not sure. I'm sure there probably is.

DR. UFFEN: I hadn't realized that.

Well,...oh, I've got one other question. In the electrolysis process, do you get any other gasses that have to be vented, from the cell?

MR. OLSON: Yes. I'm sorry I didn't point that out. On the same electrode where the caustic is produced, you also get hydrogen, and so you have two gasses that have to be kept separate, and that's part of the reason why asbestos is a good separator. It will not allow the hydrogen to go back into the other area.

Hydrogen and chlorine together are very explosive, and so they have to be kept separated. They hydrogen does come off, yes.

DR. UFFEN: What do you do with it?

MR. OLSON: The hydrogen? I'm not sure how much I can say...we are hoping that by the...right now, we burn it in our own...

DR. UFFEN: What happens to the flue gasses?

MR. OLSON: The flue gasses?

DR. UFFEN: Well, if you burn it, they go up the stack and out into the atmosphere.

MR. OLSON: Yes, yes.

DR. UFFEN: Are they monitored for asbestos particles, do you know?

MR. OLSON: I doubt it very much. We have monitored the chlorine for asbestos fibers and find very, very little. Most of the time the measurements are shown to be nondetectable, and I'm sure the same would be true of the hydrogen.

Shortly we hope to be...we are supposed to start sending that hydrogen to be sold as a product.

DR. UFFEN: Very interesting. I do know the asbestos was relatively impervious to the hydrogen, which would make it much more attractive than any metal.

MR. OLSON: Yes, very definitely.

DR. DUPRE: Dr. Mustard?

DR. MUSTARD: I would like to go back to the point that Dr. Dupre was talking about. Obviously you are in an industry which has many potentially hazardous substances, and therefore the industrial hygiene program is extremely important, and you've had a joint committee approach to handling these things for ten years. Since one of the problems that we will have to face as a commission is the question of substitutes and new materials, I wonder if you could tell us what kind of policy you have when you introduce new chemicals into an operation such as the Dow Plant in Sarnia. Do you tell the joint committee that there is a new chemical coming on line? Do you tell them what the hazards of it are likely to be? Do you have any kind of screening program in place?

MR. OLSON: Normally what we'll do is to go into

MR. OLSON: (cont'd.) that plant that that's occurring, with an education program that we are bringing in a new material into the plant, and this is what it will do if you are overexposed.

We have a system whereby every year every chemical in every plant is monitored, is looked at, audited or whatever you wish to call it, by the plant and the industrial hygiene department.

DR. MUSTARD: Is that given to the work force, that information?

MR. OLSON: That information is available to the work force and once a year we tell the employees in each plant the chemicals to which he may be exposed and the consequence of exposure to toxic amounts. The data sheets for those materials, both an internal data sheet and sometimes a material safety data sheet, are available in the workplace for that man to see, if he wishes to use it, at any time.

DR. MUSTARD: Do you keep exposure records for the workers as well?

MR. OLSON: We keep exposure records of those materials that we monitor. We don't necessarily monitor everything.

DR. MUSTARD: But you select the materials yourself? You don't just pick up the materials the government says you must monitor? You pick up the ones you think are a hazard?

MR. OLSON: That's right. We select...at the same time that we are going through this yearly audit of chemicals...we call it a chemical physical agent inventory...the industrial hygienist sits down with the plant person, plant supervisor, and goes over all the chemicals that are there, and then puts on it a hazard rating, is what we call it. It's not really a hazard rating, it's a priority rating of which materials the industrial hygienist thinks should be monitored. Those

MR. OLSON: (cont'd.) materials which are extremely toxic, or those materials which are maybe not so toxic, but there's a lot of exposure to, and he determines which materials should be monitored and then it's the duty of the hygienist and the co-ordinator in that plant to get those monitored during the year.

Once we have the data, that information is also fed back to the employees.

DR. MUSTARD: What do you do now about the concern about new chemicals being possible carcinogens, and prescreening? Do you have any policies for that?

MR. OLSON: Yes. Prescreening...well, let me kind of take that in two ways. The prescreening...before we allow, before we let any chemical into the workplace, we will normally sit down to look at the data that is available on it and make a judgement. We have on staff in Dow Canada a toxicologist, we have available to us a large number of toxicologists in the United States, in our Dow Toxicology Laboratories. Using their best judgement, what should we use, what testing should be done before we begin to use that material in the work environment.

Normally if it's a brand-new chemical that we are producing, we will begin to follow that with certain toxicological screening tests as that chemical progresses from the workbench, R & D workbench, to the pilot plant, the semi-plant and on into production, and each level will add a few more tests onto it as it's going along.

Carcinogenic...if we get new data, and I'm not sure that I'm answering your question, but as we get new information on any material, that information is fed back to the employees in the workplace.

DR. MUSTARD: Let me pose a problem for you.

MR. OLSON: Sure.

DR. MUSTARD: Let us suppose...I presume you are using things like the aims tests to look at mutagenicity?

MR. OLSON: To some extent, yes.

DR. MUSTARD: And animal toxicity tests if there really is suspicions about carcinogenicity. Let us suppose you have a new chemical that you want to use, and it comes out positive in animal testing, as a carcinogen. How do you handle it at that point? Or have you had any of those problems?

MR. OLSON: Yes. Well, I guess...yes, I guess we have, yes. What is done is, we take a very close look at it and sitting the product department people down with the toxicologists, the technical people, and looking at the options, the degree of carcinogenicity and where are we going with that material. We feel that with proper controls we probably can handle just about any material in the workplace, just by reducing exposures to those levels.

DR. MUSTARD: And you do those by engineering control systems and using robots, etc., to handle it?

MR. OLSON: Engineering controls, principally. Depending...there are some things that you can't engineer. If a pump goes down and you can't clean it out, you can't really put engineering controls on that. You have to dress the man up to the ultimate before you ask him to do the cleaning of it, and you clean it as soon as possible.

It's really a balance of engineering controls, personal protection...we don't like to use administrative controls because it's very hard to say where a man is going to be at eight o'clock in the morning or four o'clock in the afternoon, especially if he is a maintenance man.

But a good blend of engineering controls and personal protective controls.

If it's a new plant, a new product that's coming onstream, when we build new plants, the industrial hygiene,

MR. OLSON: (contd.) toxicology, safety, loss prevention, all have input into those new plants...before they are erected.

DR. MUSTARD: So that you will have designed the plant to create minimum or zero exposure to the work force, is that correct?

MR. OLSON: We will design it to create minimum exposure. I won't say zero because I don't think there is such a thing. Minimum, yes.

DR. MUSTARD: No, but you are really going to minimum?

MR. OLSON: We'll go as far as we possibly can, yes. Definitely.

DR. MUSTARD: Yours is a big corporation. At what level in the decision-making process does health and safety get considered? I don't know whether...do you report to the president, vice-president, chairman of the board, or what?

MR. OLSON: I report to a manager of environmental sciences for Dow Canada, who reports to a vice-president. I also report...I wear two hats...I also report to the manager of safety, health and loss prevention for the Sarnia division, who reports to the general manager of the Sarnia division.

To answer your question a little more thoroughly, safety and health come into decisions at all levels. We have a corporate statement that has been made on Dow in the work environment. For example, on industrial hygiene or industrial occupational health, and that says that we, as a corporation, will do these things, and that was written by the president of the company, of the corporation.

DR. MUSTARD: From your general knowledge and experience, is this given a higher than normal attention in a big corporation? It seems to be at a fairly high level of

DR. MUSTARD: (cont'd.) the decision making.

MR. OLSON: Yes. From my general experience, I believe it probably is. I think, however, that as we gain more and more experience and as we as large corporations give our knowledge out and talk about what our experiences are, I think the small corporations are beginning to pick this up and are doing it. I think, you know, my experience over the last ten years in industrial hygiene, we have had a multitude of smaller companies coming to us and asking for help...you know, asking for information from us, asking to sit down with us for a day or two just to learn about our occupational health programs.

So they are becoming aware, and I think the awareness as we go along is getting greater and greater.

DR. DUPRE: One last question, perhaps, Mr. Olson. While you were making your presentation I noted your statement to the effect that most of the asbestos that you are using in the chlor-alkali process is chrysotile. Insofar as your presentation was, I think, meant to put before us what may be an essential use of asbestos, is any particular kind of asbestos essential? Do you need, say, to use or to have any mixture of crocidolite in the asbestos you use?

MR. OLSON: The reason I said that, we use all chrysotile in our chlor-alkali facilities. The reason I said that is because I don't know what some of the other chlorine manufacturers use. They may use some in their processes.

We have gone to one hundred percent chrysotile.

DR. DUPRE: As far as your experience goes then, a hundred percent chrysotile will do the job?

MR. OLSON: Yes.

DR. DUPRE: You don't necessarily have to use any other kind of asbestos?

MR. OLSON: That's right.

DR. DUPRE: Any further questions?

DR. DUPRE: (cont'd.) Sir, may I thank you indeed for joining us this afternoon, and for the presentation.

MR. OLSON: Thank you. I would like to thank you for the opportunity.

---Mr. Olson retired

DR. DUPRE: May I now invite Mrs. Glaser, who I believe is accompanied by Mrs. Dodds this afternoon.

Mrs. Glaser, Mrs. Dodds. Please proceed.

MRS. GLASER: Gentlemen of the Royal Commission, I have submitted a brief regarding the similarities of my husband's condition and that of three diseased persons. I have brought some of Gus's x-ray data with me, having obtained them from the Scarborough General Hospital.

I also brought them along just to show how many are being used in two years.

I'm not going to read them to you. I just made a small notation. They are from September 4, 1978, to March, 1981. Each time Gus was admitted, it was for breathing problems, fever and complications, etc.

In December 10, 1979, Gus began to have abdominal pains. Now, this is something that has been becoming more severe in the last two years.

Now I did a little rundown on how many times, just the dates, and how many times he has been x-rayed, to make a point that with all the x-rays that he is having, if he doesn't die of asbestosis first, he certainly will die of radiation because the man has an average of...September 4th, he was admitted with breathing problems, chest pains, left lateral.

Now, I don't know anything about reading them. I'm hoping to get someone that might be able to read more into them.

MRS. GLASER: (cont'd.) September 20th...he was in the hospital all this time, but you can see the regularity of what they have been giving him these x-rays.

October 16, 1978 - x-ray for chest pains.

The 10th of December, 1978, again bad breathing problems, another x-ray.

December 12th, 1978, x-rays of the larynx because his voice had collapsed.

December 14, 1978...now I noticed on the one x-ray they wrote down fibrosis and pneumonia on the left face.

Now, he was in there from September right up to December 14th, he came home one day for Christmas. He was back in...there is a period here now from December of 1978 to February, 1979...I think he was home a couple of weeks.

He went in again for just...for breathing problems.

March 26, 1979 - the same.

March 27, they gave him more x-rays because he had severe abdominal pains.

August 15th, chest pains.

October 10th, breathing difficulties.

October 26th...this is the same year, the same.

December 6th, the same.

December 10th, stomach, abdominal pains.

December 13th, they did more x-rays, abdominal pains.

The 19th...now there is a period from December of 1979, to December, 1980, where he was in Western Hospital, and he was also in the Toronto General Hospital, with pains...always on oxygen.

December 22, 1980 - again they did an x-ray of the larynx.

Now the latest is February 26th, 1981, where he went in with severe chest pains and stomach pains.

No one ever told me what was really going on,

MRS. GLASER: (cont'd.) other than we know he has got breathing problems.

Now, I might add one thing, I don't know why...we have a very good doctor...and he knows my husband has asbestosis. I have asked him to put it down in writing, but he won't. He says, 'I'm not treating him for asbestosis, I'm treating him for breathing. I keep him alive, that's my job. Other than that, well...'

In February, 27th, 1981, he went in and I took from the x-ray...I couldn't read all of it, by the way, that chest and then there was something, and then pleural reaction on the left face.

He was in from February right to March 14th, 1981, where they did another x-ray, and they put - chest, pleural thickening and some more I couldn't read.

Now, I have a letter from Medigas Limited in Toronto, which I would like to read.

It says, "Dear Mrs. Glaser: The total amount paid in 1980, for Mr. Glaser's oxygen and rental of the equipment, is two thousand, nine hundred and seventy dollars and fourteen cents".

Now, why would a person need that much oxygen if he's only got, as they say, forty percent asbestosis? This amount was paid by the Workmen's Compensation Board, and there is a signature.

Now, again I must say that an individual that has a slight breathing problem would not use such a huge amount of oxygen, nor would he require so many admissions to the hospital. I conclude that the Occupational Health Branch are negligent and not qualified in the diagnosis of asbestosis.

That's really...I mean, I could go on and on, but I think I am making my point, very much so. At present my husband is home, he is using oxygen. We have two tanks at home.

MRS. GLASER: (cont'd.) And this weather certainly isn't helping.

Now, what happened last week, I believe it was Tuesday night, at a quarter to five, he rang the bell and he says, "I'm not getting any oxygen".

Well, he has two hoses - a very fine one that they use in the hospital, that you insert in the nose, but we also have a real heavy one, the round one, that you put over the mouth.

I ran to the closet, pulled the heavy one out and put it on, and he was just choking. He wasn't getting enough oxygen.

So the name of the game is, try to be calm under this stress. I immediately gave him a needle to calm him down, because he was getting really uptight because he couldn't get the oxygen, and phoned the hospital to stand by that we might have to bring him in. What they use there is, I believe, a lighter oxygen, like a helium or whatever, that they put on and if you are really bad, you can breathe through it.

Well, we got through the night, but this is just an example of what life is with a person that has asbestosis. The sorry part of it really is, that they won't compensate a person while he is alive.

Now, I've gone through ...I heard here the gentleman was saying, well, we will take x-rays over fifty. My husband was forty-two when he first started with breathing problems, and we went how many years...I think six or seven years...and nothing.

Then in 1970, we finally went to Workmen's Comp, and it took them until 1973 before they finally said well, yes, you do have asbestosis. They classified it as forty percent then, and it's still forty percent today.

Somehow, it doesn't seem to ring right, and I don't know what you can do. Like, my husband's case is supposed

MRS. GLASER: (cont'd.) to...let me see..we had the hearing, I believe, at the appeal board, in...Odette, do you remember?

In May. I didn't write it down. They said, well we'll let you know sometime in July.

Why? Why must we wait? My husband could be dead by then. It is just...there are no words. I mean, when I hear the corporations sit there and whitewash it and tell us what standards they have taken and this picture, well they say they wear masks...my husband worked right in asbestos, there was no respirator, there was no coverall. They didn't even tell him to change the clothes. He came home and he used to shower.

Really, I get to the point...I've said it over and I am saying it over again, and we don't seem to be getting anywhere. It just seems to go on unheard.

I don't know whether...what I have said. I could go on, but it's really...I'm not going to make any more sense if I say the same thing over and over and over, but I would like to see justice being done, and something being done for the men while they are alive.

In the brief I mentioned I have lost three people very close to me, that have worked in Johns-Manville, and they knew, they knew that something was wrong with them, and I think in the letter there I stated the case, I showed the similarities that Mr. Litke died of a heart attack.

Even then, Workmen's Comp asked him to come in for a checkup, and he was in the hospital being operated on for lung cancer. It was diagnosed first as a heart attack, until they did the autopsy.

I really...I don't have much more to say, except I think that we should be given...especially the women, we haven't got lawyers, we haven't got the money to hire lawyers...

MRS. GLASER: (cont'd.) we should be given a better treatment, I guess would be the word, better treatment than what we are getting.

Like, I shouldn't be here. My husband is ill, but I feel if I don't come up and speak up, how many women, they just don't want to take the time out or they don't know what to say, or they are afraid, or maybe they are going to cut me off of my four hundred dollars if I go. They are frightened, and it's silly.

I really...listen, I rest my case.

DR. DUPRE: Thank you.

Dr. Mustard, any questions?

DR. UFFEN: I have no medical training. I can't help.

MRS. GLASER: Well, I would like very much, like I say, I just got them. Now, this is only two years of x-rays. I can't read them. I know something is wrong with him. I'm hoping to get someone other than our doctors to look them over and see what they find.

We know he has got asbestosis, there is no doubt about it. It's just...how much do you have to have before Workmen's Compensation will say, well, we will pay you a hundred percent? You have to die, have an autopsy, and then the wife will get a pittance.

This is sad, very sad, that this should happen in Canada.

I think Mrs. Odette Dodds here is one case, of what she had to go through in order to prove her case, and during the time that her husband was dying she had absolutely no money from Workmen's Comp. They cut her off.

In the condition my husband is now, it would be more than tragic if I had to go through the same thing as Odette.

MRS. GLASER: (cont'd.) Yes. As it is now, which is a tragedy, my husband has forty percent. If my husband would die tonight or tomorrow, because he is not classified as one hundred percent, I would not get one penny. And my husband said to me, look, I know I'm dying, I'm not well. I don't want you to have to go through what Odette or many other women are not receiving a penny. So now I have to fight.

I should be home looking after him. I have to fight for the case. So there's injustice all the way around.

DR. DUPRE: The case certainly is, as you outline it, that he is still rated as having partial disability?

MRS. GLASER: Yes. He's got partial disability. And is it right that I have to wait...what do they do at the hearing board when you go there in May and they wait June, July...they wait about three months before they give you a decision. In that time they don't know what they are doing. They look at the paper...this case? It doesn't sound bad on paper, and they don't even have all the information there. If they do, they lose it.

This is...whatever they are doing, they should be able to make the decision there within forty-eight hours....while it's fresh in their memory...not three months later.

Well, I'm not...as Odette said to me, don't give up, Betty. I'm not. But it's very strenuous when you have an ill husband and you have to start with paperwork and research work. But I could almost bet that when I get my letter from Workmen's Compensation, they will write - it has not changed, not compensable. Because we have all gone through it.

Isn't that right? Cauchi is one, Odette is one. It's ridiculous that we have to...even this Commission, it's great, we can bring it out in the public. But how long is it going to be before anything is going to be done? It may be two years. I may not...by them, God knows what will have happened

MRS. GLASER: (cont'd.) in my life. This is the tragedy of it all.

(REPORTER'S NOTE: At this time an unidentified speaker made an inaudible comment to Mrs. Glaser)

MRS. GLASER: No, no. Well, my doctor, he's good, but he is not interested in asbestosis. He says, "Betty, I'm only interested in keeping your husband alive". He's done a good job of it. When he has pneumonia, they rush him in, they put him on antibiotics intravenously, and he manages to fight it... if you call that living, being five, six months in isolation.

This is the point I want to bring across. Where do we go as a party...especially...we had a meeting a couple of weeks ago, from Johns-Manville...there were seventy people that have asbestosis, and about two-thirds of them are getting pittance, a hundred dollars a month, a hundred and fifty dollars a month. Can you live on that? I mean, you know it hurts me that in these times where our country has money to help other countries, their own people are not getting a fair shake. This is what hurts me, and I'm not only fighting for myself, but I'm fighting for all the other women that just don't have the courage to get up and speak and they would rather do without, and their husbands died because of ignorance, because the company never told them about asbestosis. Now they whitewash it, we are doing this, we are doing this and we are doing that.

But what about the hundred and how many people that have lost their lives from our company, in our area, I should say, Johns-Manville alone? I've lost the figure, it's well over a hundred, well over a hundred, and the company only has, I think, about six hundred employees.

I'll go out of here and I won't feel...I'll feel I've spoken my mind, but what is being done? Nothing.

MRS. GLASER: (cont'd.) Absolutely nothing is been done.

I have written letters to...I'm going to speak to Frank Drea, he is our MP from our area. I spoke to him a year ago. He tried on my behalf, got nowhere.

So what do I do now? Do I go home and say well, it's too bad, I'll just have to wait until the Commission..maybe it will take them two years, maybe by then we'll hear. But in two years, I'm not the only woman, there are two other men that have died from Johns-Manville within the last month, I believe.

Is that not right? There's two other people have died. I wonder what is happening to their parents. Pardon me, to the families, the children, the widows. How do they live? The breadwinner is gone. So do they give them a substantial amount? No, the wife has to go and live on welfare.

It's pitiful. I don't know, like I say, I think we should get more, more help and more assistance. If it wouldn't be for one person helping the other one, where do we go for help and for justice? This is what I want, only justice.

A criminal kills a person, goes to court, he gets somebody - a defender - paid by the country. But we don't. Not one of us get any help, except what we help each other.

DR. DUPRE: Well, Mrs. Glaser, you have the courage to speak up and you have made the time to come here. At least you certainly are doing your part.

As for what our part is, I cannot tell you yet how we can work out what our part is as a commission, but I think that I can at least say this much to you, that having made the time to come here, and having spoken out as you have, the least we can do is ensure that your portion of the transcript finds its way to the WCB at the very top.

MRS. GLASER: Thank you very much.

MRS. GLASER: We want the Minister of Labour...

DR. DUPRE: No problem.

MRS. GLASER: Thank you.

DR. DUPRE: We can circulate that transcript.

MRS. GLASER: Well, we certainly would appreciate any help we can get.

DR. DUPRE: Thank you.

MR. CAUCHI: What they are tell us right now, Mr. Chairman, is, we'll wait...like, all these...like she said, we had a meeting, ninety people showed up and we encouraged them to see their member of, in their riding, and what they are saying is, oh, we'll wait until Dupre comes out with his report. That's going to be eighteen, 1982, like you said at the opening remarks, you know, and in the meantime every month we are losing two or three members, and it's not very helpful.

DR. DUPRE: Never mind 1982, at this rate it could even be 1984.

MRS. GLASER: Oh, don't say that.

MR. CAUCHI: I thought you were going to say 1981.

DR. DUPRE: Before we rise, may I simply point out, but my executive co-ordinator will set me straight on this, that when this Commission next meets it will be holding its opening day of phase two hearings. This will be on Thursday, which if I remember correctly is the 11th of June, at 10:00 a.m., at 180 Dundas Street West.

MS. KAHN: Hearing room three.

DR. DUPRE: Hearing room three, twenty-first floor.

The Commission rises then until Thursday.

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THE INQUIRY ADJOURNED

The foregoing was prepared from the taped recordings of the inquiry proceedings.

Edwina Macht

EDWINA MACHT